a playce like home
a play-focused approach to designing a nostopia

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This project started with a focus on displaced children and providing them a safe place to play and create a sense of belonging. As the research progressed, the concept of homo ludens emerged from literature studies. This revealed play as an intrinsic aspect of human nature, not limited to children. This discovery led to a broader perspective on the role of play in creating temporary environments that feel like home. Inspired by amusement parks, where play forms the essence of the space, an alternative future for refugee camp Mavrovouni was envisioned. Ultimately, the thesis aimed to create a sense of home for those in transit, where play was given a central role in the design. Hence, the title a playce like home was chosen.

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P5 Report
January 9, 2025
Key Words:
Refugee, Play, Home, Heterotopia, Lesvos

My dear Marwan,

I wish you remembered Homs as I do, Marwan.

But that life, that time, seems like a sham now, even to me, like some long dissolved rumor.

First came the protests.

Then the siege.
The skies spitting bombs.

Starvation.

Burials.

I said to you, 'Hold my hand. Nothing bad will happen.'

These are only words.

A father's tricks.

It slays your father,
your faith in him.

Because all I can think tonight is
how deep the sea,
and how vast, how indifferent.

How powerless I am to protect you from it.

All I can do is pray.

••

Because you, you are precious cargo, Marwan, the most precious there ever was.

I pray the sea knows this.

...

All of us impatient for sunrise, all of us in dread of it. All of us in search of home.



Fig. 1: Illustration of refugee boat [Williams, 2017]

Abstract

Since the start of the Syrian conflict in 2011, people cross the Mediterranean Sea everyday, seeking safety and shelter. Arrival countries like Greece have difficulty to provide all displaced people in their basic needs. One of the most vulnerable among this group are the children. They have experienced war violence, flight dangers and displacement. They arrive at a camp that lacks places to play and develop, is unsafe and unfamiliar. In other words, they lack a sense of home.

This thesis is based on the journey from Syria to The Netherlands, with as transitory space; camp Mavrovouni on Lesvos. The Syrians leave behind a destroyed hometown, a dystopia, and long for a safe refuge, a utopia. Instead they arrive at a camp and have to wait, this place is a heterotopia. The project draws on the parallels between heterotopia and the concept of play, forming the basis for the development of nostopia; a playce that feels like home. This research investigates whether a play-centered approach can transform Mavrovouni into a nostopia.

The three homes along the routes were mapped and analysed to gain insight in their spatial characteristics. Ethnographic research conducted during a field trip to Mavrovouni provided insights into the daily lives of its residents, focusing on their use of space and children's play behavior.

Findings revealed a pressing need for safety, agency, and belonging. This was broken down into concrete design objectives. By using the objective tree and a conceptual model several visionary scenarios were developed. Patterns were derived from ethnographic insights and further supported by literature, anchoring the scenarios within the spatial context of the camp.

The resulting pattern language is not only accessible to design professionals but also to non-experts through an accompanying game. The initial concepts and requirements for the game are outlined. The scenario maps and pattern language were used to envision an alternate future for Mavrovouni, reimagining it into a playce like home.



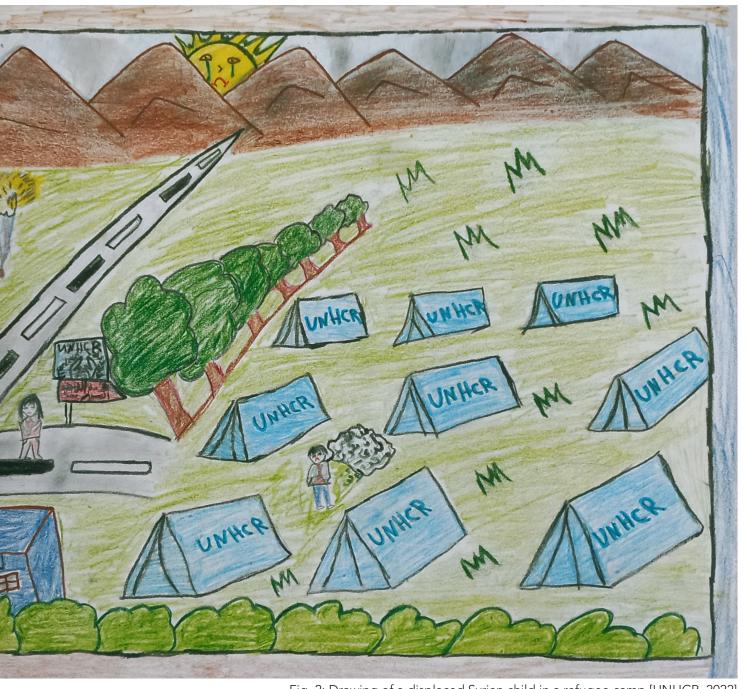


Fig. 2: Drawing of a displaced Syrian child in a refugee camp [UNHCR, 2022]

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"Er is vrede ver voorbij de onrust Er is blijdschap dieper dan de tranen Er is sterkte zelfs in onze zwakte Er is trouw die ons nooit zal verlaten" [Mozaiek Worship, 2019]

Preface

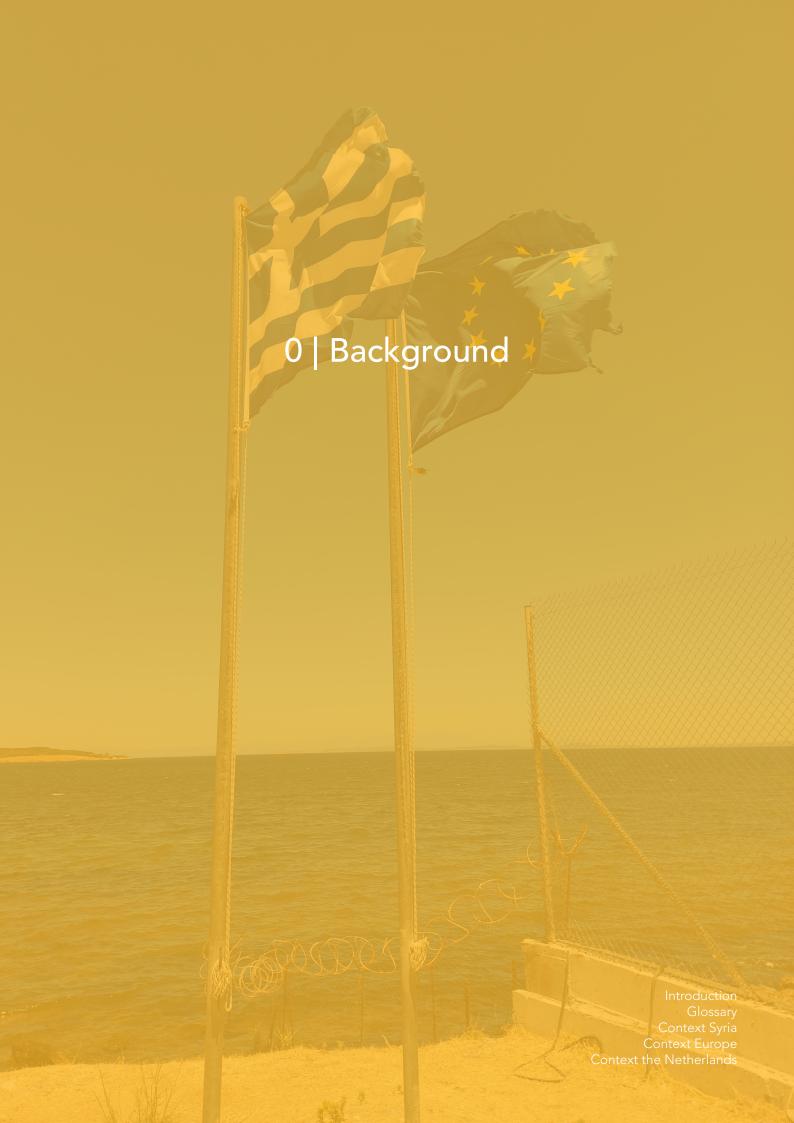
I am grateful to present my master thesis 'a playce like home' as the final project of my master Urbanism. The journey felt like a roller-coaster and it would not have been possible without amazing support.

First of all, I would I like to thank my both mentors for their guidance. Francesca Rizzetto, thank you for always pushing me to my full potential by stimulating me to sketch, make models and colour outside the lines. Thanks for your kind words in moments of struggle, and leading me when I felt lost. Machiel van Dorst, thanks for your sometimes philosophical approach, your input on the pattern language, for taking me along to Gouda and down-to-earth advice in times of stress.

Secondly, I would like to thank Eurorelief, Christian Refugee Relief and all its volunteers on Lesvos, for the opportunity to serve and do research amongst them. A special word of gratitude to the girls I lived with during my stay on Lesvos, Jedidja, Marlyn en Jorina, thanks for our chats, giggles and new friendship. Thank you also for helping me test my designed pattern game, it meant much!

Thirdly, I want to thank my family and friends for their support this year. To my parents, for being my first home, offering countless opportunities, and teaching me to serve others. To Simone, thanks for letting me flourish, through your graphic advice, our talks, jogs and laughter. To my Echo squad - Kris, Pepijn, Sander, David, Ylke en Darcey - thanks for your ideas, listening ears, jokes and just making this year way more fun. A very special thank you to Jesse, for being there through it all. Thanks for your hugs, advice, proofreading, listening to my doubts, always making me laugh, being my best critic and amazing support. You are my home.

This thesis is dedicated to those leaving home behind, embarking on a uncertain journey. May you find hope for a future in God's coming Kingdom. Until that day comes, I hope this project can provide a playce like home.



Introduction

Since the start of the Syrian conflict in 2011, people cross the Mediterranean Sea everyday, seeking safety and shelter. The crossers are not only Syrians, people from other countries across Africa and Asia flee to Europe as well. They follow three main routes across the Mediterranean Sea: Eastern, Central and Western [Frontex, 2024]. These migration routes are depicted in the map on the right [Fig. 3].

The Eastern Mediterranean route directs to Greece and mainly comprises of people originating from Afghanistan, Nigeria and Syria. Along the Central Mediterranean route most people are from Tunesia, Egypt and Bangladesh and the Western route to Spain is predominantly associated in 2022 the human flow along the Eastern and Central route increased compared to 2021, whereas the flow along the Western route decreased. In the first two months of 2024, the volume of migration along the Eastern route was the most substantial, with 9150 recorded border crossings. By contrast, the Central route witnessed 4315 crossings, while the Western route accounted for 1867 crossings [Frontex, 2024].

At all of these routes, children are a big part of the fleeing population. In Greece approximately 34% of arrivals in 2022 were children, in Spain this was 14%, and in Italy 19%. Additionally they are often unaccompanied, in Greece 48% of the children do not have any relatives, in Spain and Italy this is even respectively 79% and 70%. Reasons for migration differ across the routes, at the western route more than half of border crossings are related to economic reasons, while along the eastern route the main reason for migration is war and violence in the home country [UNCHR & UNICEF & IOM, 2023]. Conflict and insecurity greatly affect the daily life of children, for example in going to school. This is an additional trigger to leave the home country and find a safe place to receive education [Unicef & Reach, 2017]. In short, all (parents of) children seek safety and opportunities for their future [Oberg, 2018].

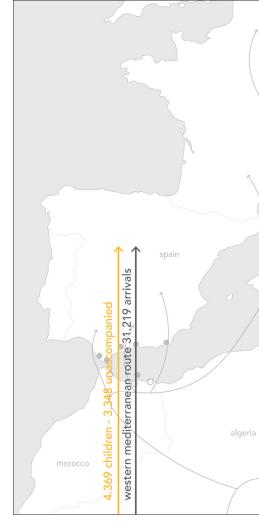
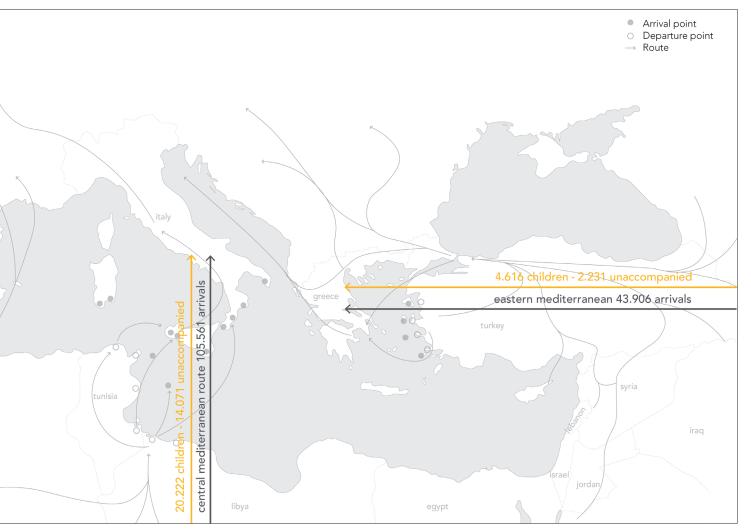


Fig. 3: Map of migratory routes and



d numbers across the Mediterranean sea [own work, 2024; based on Conant & Chwastyk, 2015; Frontex, 2024; IOM Italy, 2019; UNCHR & UNICEF & IOM, 2023]

"At risk to their own lives, the teenagers make the crossing, which they themselves call 'the game' - a bitterly ironic term for crossing borders."

[Van Driel & Blankevoort, 2021]

Introduction

Sadly, the journey towards that better future is long, uncertain and lacking safety as well. Especially children travelling without their parents have high risk of experiencing violence, abuse or exploitation [Unicef & Reach, 2017].

Arriving at a camp, adults and children are (at best) provided in their basic needs: food, shelter and clothes. The camps are lacking safety and quality of living is very poor. After the experiences of war and flight, the camp conditions are adding to their suffering [Oberg, 2018].

Apart from basic needs, children just need a safe place to play. But play is not regarded as a foundational element in humanitarian help [Woolley, 2021], resulting in limited options for children to play safely in refugee camps [Oberg, 2018]. While playing is a universal part of childhood, it is very important for the emotional, social, physical and mental development of children [Woolley, 2021]. The need for children to play is acknowledged in the universal childrens rights [UN Conventions on the Rights of the Child, 1989]. Additionally, play can be a way to understand traumatic experiences of the disaster. Mental and physical health issues, coming from war violence and flight dangers, can be dealt with through play [Woolley, 2021]. When children are able to use opportunities in their environment for play, they more likely to feel attached to places and develop their identity. The feeling of place attachment can provide stability in times of uncertainty [Weir et al., 2022].

Place attachment or a sense of belonging somewhere is incapsulated in the term 'home', which is also one of the universal childrens rights. But what if you are displaced to another country, and home does not exist anymore?







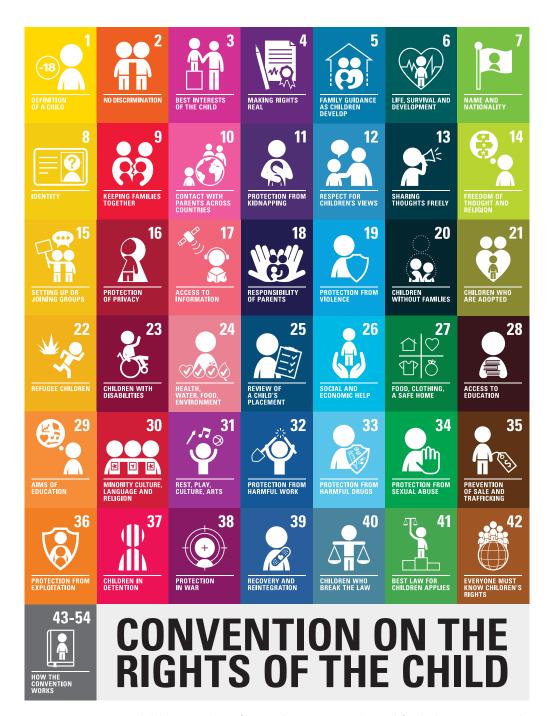


Fig. 4: Childrens Rights of United Nations explained for kids [UNICEF, n.d.]

Glossary

Asylum Seeker: a person who seeks international protection because of persecution in his/her own country [UNHCR, 2022].

Child: every human being below the age of 18 years, unless under the law applicable to the child, majority is attained earlier [UN Conventions on the Rights of the Child, 1989].

Closed Controlled Access Centre: controlled and isolated camps that restrict movement of asylum seekers. They were presented as open accommodation structures with better living conditions and increased safety, but they function more like prisons. Residents are under heightened control, constant surveillance, and repression. These structures include a RIC and temporary accommodation facilities [Refugee Support Aegean, 2023].

Detention Centre: a secure place, like a prison, used by some countries for detaining illegal migrants [UNHCR, 2022].

Displacement: the situation in which people are forced to leave the place where they normally live without their free choosing [Weir et al, 2022].

Migrant: someone who stays outside his or her own country, but is not an asylum seeker or refugee, usually for work [UNHCR, 2022 & Jansen, 2021].

People of Concern [POC]: Residents of refugee camp Mavrovouni [Introduced by Eurorelief, the main volunteer organisation].

Refugee: a person who escapes to another country to seek safety from war or bad treatment [UNHCR, 2022].

Note: The term refugee is a bit confusing, as it is a legal status as well. Not all asylum seekers are refugees, but all refugees have been asylum seekers. Thereby, the term refugee has a negative connotation. Thus, this term will be avoided as much as possible. Instead displaced person will be used when applicable.

Glossary

Refugee camp: a temporary facility built to provide immediate protection and assistance to people who have been forced to flee their homes due to war, persecution or violence. While camps are not established to provide permanent solutions, they offer a safe haven for refugees and meet their most basic needs such as food, water, shelter, medical treatment and other basic services during emergencies [UNHCR, n.d.].

Note: Although the term refugee will be avoided in this report, there is no good alternative for refugee camp. As it is a camp that provides refuge, this expression will be used.

Reception and Identification Centre [RIC]: a temporary place to stay for asylum-seekers, while they wait for their official status of refugee [UNHCR, 2022].

Unaccompanied minor: a child who has been separated from his or her parents and is not being cared for by another adult [UNHCR, 2022].

United Nations High Commisioner for Refugees [UNHCR]: the humanitarian organisation of the United Nations that is globally obliged to help and care for refugees [Jansen, 2021]. They provide housing, food, and medical care and maintain case files and fight against human rights violations. On Lesvos, the UNHCR mainly focuses on case management and documenting human rights abuses. Occasionally, it also provides housing [Van Vianen & Van Elst-Sjitsma, 2024].

This report mainly considers the context of CCAC Mavrovouni on Lesvos, the terms POC and residents will be used mostly to refer to the inhabitants of the camp.

"There is the Syria of the news: a war-torn nation with widespread destruction and home to millions of displaced refugees. There is the Syria of those who have lived there: a reminder of a home and place of belonging."

[Dahhan, 2021]

Context Syria

The Syrian conflict has its roots in the Arab Spring protests that swept across the Middle East in 2011 ["Arab Spring," 2024]. In March of that year, pro-democracy demonstrations erupted in Syria, demanding an end to the authoritarian practices of President Assad's regime. In September the first big fight between the government and the opposition takes place, in 2012 the conflict is officially declared a civil war.

One year later, an estimated 100.000 people have been killed since the start of the conflict. In 2014, The Islamic State becomes part of the conflict as well, resulting in destroyed world heritage in Palmyra in 2015. A year after, big fights and bombings take place around Aleppo. During 2015 and 2016 many Syrians flee to Greek islands. Meanwhile Russia is backing Assad and they regain territory from the opposition between 2016 and 2019. The timeline on the right provides a visual representation of the major events and territorial shifts between the various parties involved in the Syrian conflict over the years ["Syrian Civil War," 2024].

Now the conflict seems to be in a frozen state with some sporadic clashes.* The country is left in destruction and poverty, 500.000 people were killed, 12 million are displaced [Yacoubian, 2023].

This war made many leave their homes and the opportunity to return is minimal, as many homes are destroyed. The intentional demolition of homes is known 'domicide'. Apart form destruction of heritage and culture, the destruction of homes is a war tragedy. This is not only the building itself, but also where people feel they belong. It is about the destruction of public spaces as well, places where people meet and mix, the lived experience of cities degenerates [Coward & Viejo-Rose, 2020].

^{*}This was written before the fall of Assads regime by the offensive of Hayat Tahrir al-Sham [HTS] in December 2024.

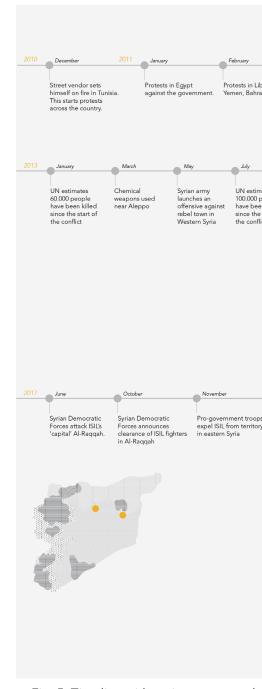
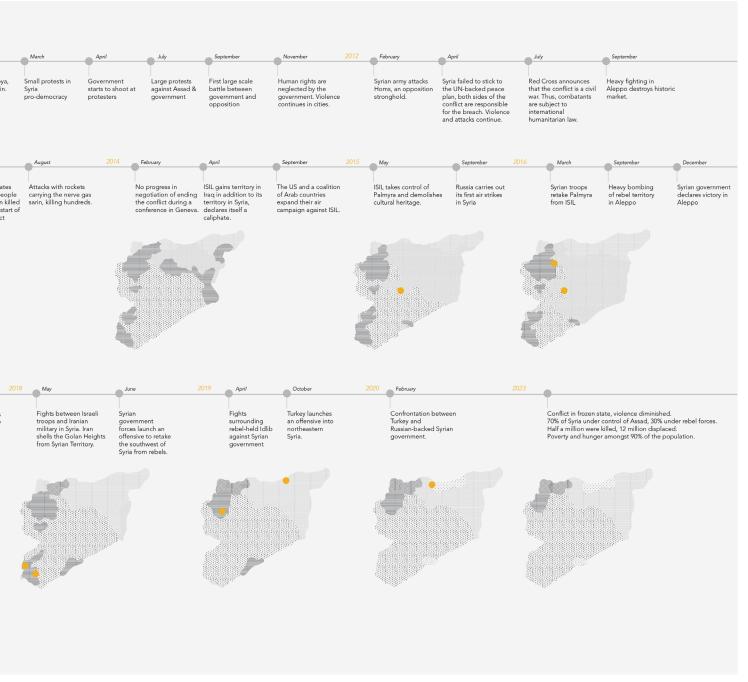


Fig. 5: Timeline with major events and t



erritorial changes of the Syrian civil war [own work, 2024; based on The Editors of Encyclopaedia Britannica, 2024., The Carter Center, n.d. & Live Universal Awareness Map, 2024]

Context Syria

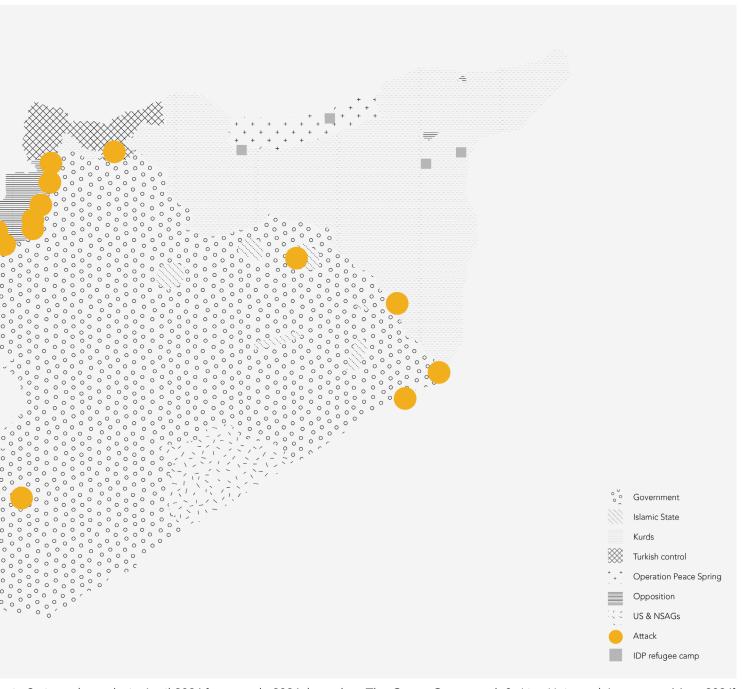
The map in Figure 6 provides a visual representation of the current territorial control exerted by various parties involved in the Syrian conflict. The boundaries and control in Syria have remained relatively static in recent years, but can still be subject to change. While the intensity of the war has diminished compared to its peak a decade ago, sporadic clashes continue to occur regularly across different regions.*

The yellow dots scattered across the map indicate the locations of attacks that took place in April 2024, offering a snapshot of the ongoing violence and instability. Notably, a significant concentration of these attacks is observed around the city of Aleppo, Syria's largest city, which remains a major battleground in the conflict. Its location and importance have made it a focal point for intense fighting, resulting in widespread destruction and displacement of civilians over the years.

Despite the relative decline in the overall intensity of the conflict, the map serves as a stark reminder that the Syrian war is not over.

*This section was written before the fall of Assads regime by the offensive of Hayat Tahrir al-Sham [HTS] in December 2024.





on in Syria and attacks in April 2024 [own work, 2024; based on The Carter Center, n.d. & Live Universal Awareness Map, 2024]

Context Europe

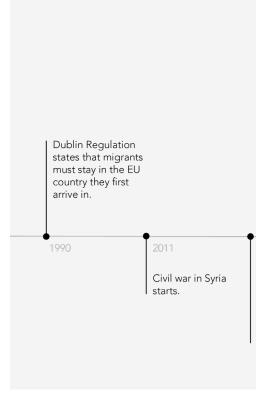
The European Union [EU] has had a lot of debate about displaced people and asylum in the last decades. Due to the Syrian conflict the migration flow increased tremendously and this puts pressure on the countries of arrival. The Dublin Regulation of 1990 states that fleeing persons must stay in their first arrival country, thus those governments are responsible to meet their human rights.

In 2015, the Greek government was not able to provide sufficient support for the amount of people that stranded there [Human Rights Watch, 2020]. This resulted in an emergency relocation mechanism of the European Union, to distribute the incoming people. Not all countries were on board with this decision, but it was executed forcefully [European Council, n.d.].

The 2016 EU-Turkey deal mandated the return of all irregular migrants crossing from Turkey to Greek islands. Greek authorities would register arrivals and individually process asylum claims, rejected claims would be returned to Turkey. For every returned Syrian, the EU would admit one Syrian directly from Turkey for resettlement within its member states. Turkey would take necessary action to block new irregular migration pathways towards the EU. In exchange, the EU would provide financial aid and member states would lift visa requirements for Turkish citizens [European Council, n.d.].

After Moria burned down in 2020, the need for better migration policies became eminent. A series of reforms in asylum policies followed and a new EU asylum agency was established aiming to improve the functioning of the common European asylum system [European Council, n.d.].

Recently, a new pact on migration and asylum was adopted in the EU. This set of acts will help facilitate orderly processes for handling arrivals, implement efficient and consistent procedures, and ensure fairly shared responsibility in welcoming asylum seekers [European Council, n.d.].



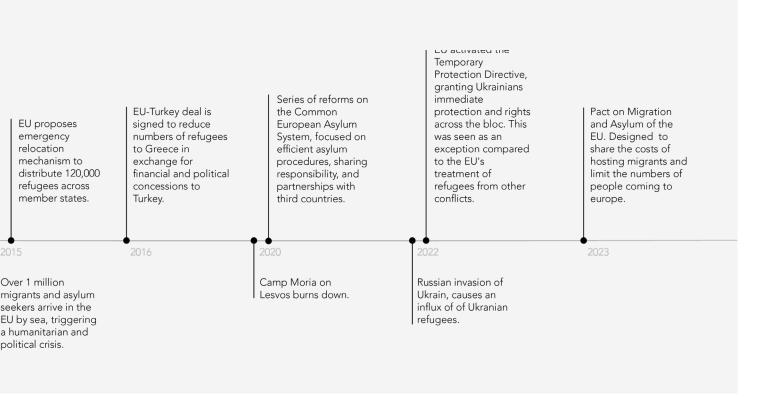


Fig. 7: Timeline of migration policies in Europe and influential events [own work, 2024; based on European Council, n.d.]

Context the Netherlands

In February 2024 the Dutch government implemented the Dispersal Act, indicating that refugees should be distributed evenly across municipalities. This consists of three phases [Fig. 8], firstly the national government will estimate how many places are needed in total the coming two years. This total number is divided across municipalities, based on its current inhabitants and its socio-economic score [Ministerie van Justitie en Veiligheid, 2024]. The formula used for this is:

 $(SES + 1) \times iM/iN = Wf$

CR * Wf/TWf = Id

SES = Socio-Economic Score

iM = inhabitants Municipality

iN = inhabitants National

Wf = Weight factor

CR = Capacity Requirement

TWf = Total weight factor

Id = Indicative distribution for the municipality [VNG et al, 2024].

In each province the Indicative distribution of all municipalities is added up to establish the assigned provincial task. The municipalities then negotiate the specific distribution within their province; which specific municipalities will provide reception facilities and for how many places? In the second phase, if municipalities can not jointly meet the entire provincial reception task, the State Secretary can designate and oblige specific municipalities to start receiving asylum seekers. The last phase is the realisation of the reception places by the municipalities. After two years the cycle starts again with a new estimation of the needed capacity. It should be noted that this act is for the reception of asylum seekers, after they get a permit to live in the Netherlands, a new dispersal may take place [Ministerie van Justitie en Veiligheid, 2024]. The municipalities with the lowest SES are Delft, Enschede, Groningen, Heerlen, Kerkrade, Maastricht, Pekela, Rotterdam and Wageningen.

For the last location of the journey, Delft is a logical choice. I live and study here, Delft is my home and it may become the home of displaced Syrians.



Fig. 8: Infographic about the phases of

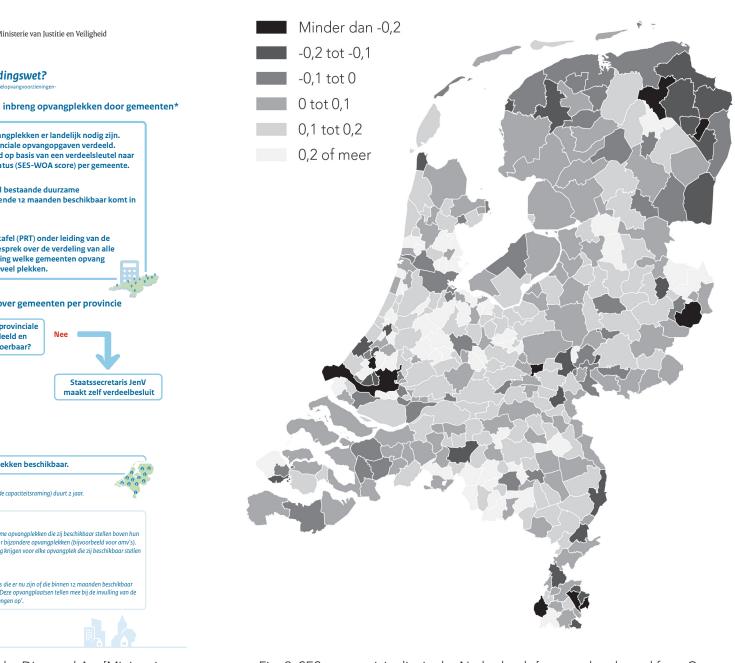


Fig. 9: SES per municipality in the Netherlands [own work, adapted from Centraal Bureau voor Statistiek, 2022].

1 | Problem Field Problem Statement Research Question & Design Aim Context Journey Context Camp Stakeholders Camp Societal & Scientific Relevance

"There is nothing harder for a person than to lose his or her country and home..." [14 year old Mohammad in UNHCR, 2022]

Problem Statement

The overarching problem is the civil war in Syria and the exodus it has caused. This thesis will accept the war situation as the status quo, thus highlighting the necessity of providing shelter for displaced people. The current camp conditions do not meet the needs of displaced children.

These children have experienced severe trauma, including exposure to war violence and the dangers of flight, such as abuse and exploitation. They have left their familiar homes and embarked on a journey filled with uncertainty and a lack of belonging. Upon arriving at the camps, their basic needs are barely met. These children need to heal from their traumas and have opportunities for development. However, the current camps are unsafe, unfamiliar, and lack places for children to play. In other words, they lack a sense of home.

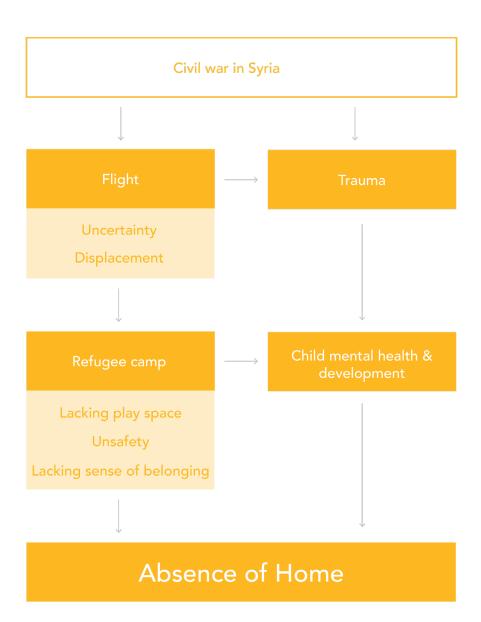


Fig. 10: Problem diagram absence of home [own work, 2024]

Research Question & Design Aim

A displaced child does not have a home with a specific location anymore. The context of refugee camp Mavrovouni is unfamiliar, as well as its location amidst a different country and culture. The focus of this thesis is playing, because of the strong belief in play being a fundamental need of children. This results in the following research question:

How can play be used to create a vision of heterotopia Mavrovouni that provides a sense of home for displaced children?

This thesis consists of two parts, the first being more research focused and the second more design focused. For the first part the sub-questions will be as follows:

- How can the concept of topias benefit re-envisioning the refugee camp in relation to home and play?
- What are the spatial characteristics of the three homes along the route of displacement?
- How do children and parents live and play in CCAC Mavrovouni?
 An explanation of the concepts of home, play and topias will follow in

An explanation of the concepts of home, play and topias will follow in the theoretical framework [chapter 2]. The context of refugee camp Mavrovouni will be clarified in the following paragraphs.

For the second part only a design aim is stated, the sub-questions will follow after the research part, by using its outcomes. The design aim is providing a sense of home for displaced children in Lesvos. The take-along Playmobil doll-house [Fig. 11] is a visual metaphor for this: a home to play within, while on the go.

In this thesis the notion a place good for children, is a place good for all [Doumpa et al., 2018], is implemented in the context of a refugee camp. The underlying belief is that a focus on the most vulnerable will result in a better design for everyone.



Fig. 11: Take along Playmobil doll-house as a metaphor [Playmobil, n.d.]

Context Journey

The context of this research is the flight from Syria to Europe, with Lesvos, Greece serving as a first destination. As one of the primary entry points for fleeing people arriving in Europe, this island holds significant importance along the difficult journey.

The civil war in Syria has been raging for over a decade now. As depicted in Figure 6 [Chapter 0], shootings and bombings continue to occur even today, primarily concentrated near Syria's largest city, Aleppo. The Battle of Aleppo, spanning from 2012 to 2016, left much of the city's urban fabric in ruins, including monuments, souks, and mosques. Access to essential services like water, power, and healthcare was severely minimized, making daily life in Aleppo a big struggle. This devastating battle resulted in 25,000 casualties and the displacement of around 2 million people from Aleppo. Aleppo stands as the Syrian city most severely impacted by the conflict [Bandarin, 2022]. Therefore this city was chosen as the starting point for the journey explored in this study.

Seeking safety and a better standard of living, Syrians embark on the dangerous journey from Aleppo to the Turkish coast, where they board small boats towards Lesvos. According to UNICEF [2017], the journey from Syria to Lesvos typically takes between one to three months.

Upon arrival on Lesvos, people are required to register themselves at a designated registration and identification centre. As they await approval of their refugee status, they are forced to reside within a refugee camp. However, due to the slow pace of asylum application procedures, this process takes an average of 71 days [van de Wiel et al, 2021].





Fig. 12: Migration route from Syria to Europe that will be explored in this research [own work, 2024]

Context Camp

This research and design project focuses on the Closed Controlled Access Center Mavrovouni on Lesvos, an island of Greece. The camp falls under the jurisdiction of the municipality of Mytilini, the capital city of Lesvos. The city centre is located approximately 5 kilometres from the camp site. Mytilini houses the airport and the main harbour of Lesvos. The camp is located on a peninsula, a small piece of land between the sea and a main road. The site has formerly functioned as military shooting range. The camp is separated from the rest of the island by fencing with barbed wire and a concrete wall [Refugee Support Aegean, 2023].

Established after the destruction of Camp Moria in 2020, this centre was set up with high hopes for improved living conditions. However, upholding humanitarian standards of living conditions has proven to be extremely challenging. Media reports have repeatedly highlighted that children's rights in this camp are not being met, and that change is urgently needed [Ansa, 2023].



Fig. 13: Aerial view of refugee of



amp Mavrovouni on Lesvos and data of current inhabitants [own work, 2024; based on Google Earth, 2023 and UNHCR, 2024]

The Greek government does not want to improve the living situation because they think more people will come. I think the crossing is intense enough.

[Field Trip Diary, 2024]

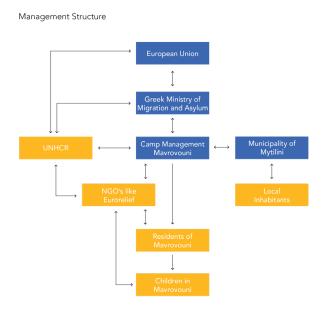
Stakeholders Camp

The stakeholders of camp Mavrovouni on Lesvos and their goals are identified in Figure 14. There are two main groups, the governmental parties and the civil society.

Their relations are depicted in the management diagram below. The government is quite hierarchically structured through the scales; the EU, the Greek government and the camp management. The civil society is collaborating a bit more horizontally, although the UNHCR and NGOs are working more closely with camp management than residents for example. The residents and children do interact with NGOs like Eurorelief more than with the camp management. The camp is formally located in the municipality of Mytilini, but is managed separately, only matters affecting local inhabitants will be discussed with the camp management.

For this project it is crucial to get the governmental parties more interested in improving the living situation and to give the residents and children more power over the matter. Currently, there is limited clarity regarding the specific responsibilities of the organisational parties: the different NGOs and the government. As a result, these entities will be treated collectively as a single stakeholder in this project. The primary focus will be on giving agency to the residents and their children, identifying three main stakeholder groups: the organisation, the residents and the children.

Stakeholder Goal Manage the refugee crisis in Europe, protecting those in need, supporting Greek government with policy and **European Union** funding for operating camps. Providing funding, policies and staff for camp management. Greek Ministry of Government Migration and Asylum To manage and operate the camp providing securtiy, process asylum applications, and implement national Camp Management migration policies. Municipality Mytilene To balance local community needs with the presence of the refugee camp and mitigate its impact on the area. **UNCHR** To provide humanitarian assistance, monitor camp conditions, and advocate for refugee rights. NGO's To provide essential services and support to residents. This includes the provision of food and clothing, medical and social care, education, legal aid. To feel safe in their environment, being able to make a living and no degradation of the islands environment. Lesvos Inhabitants To seek asylum, access basic services, and improve their living conditions in terms of safety. Residents Mavrovouni Children Mavrovouni Being able to play and develop safely in the camp environment.



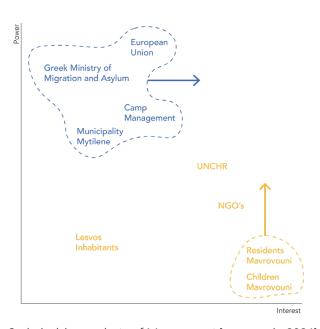
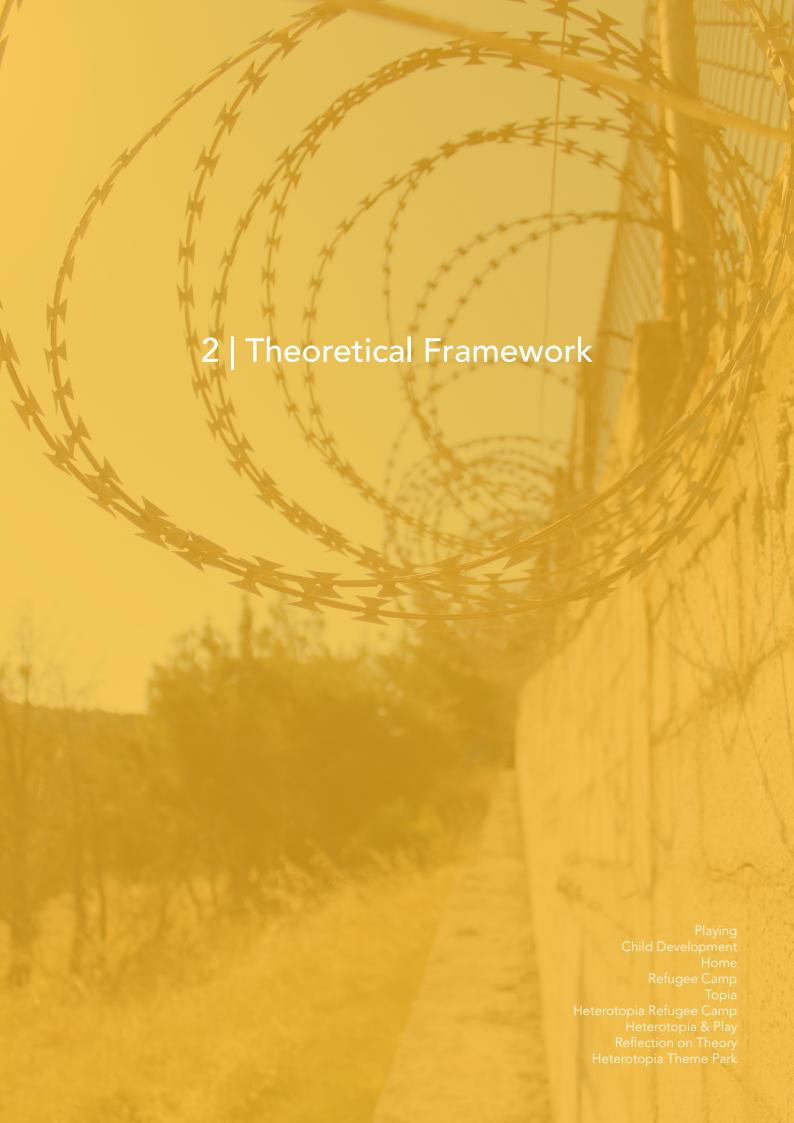


Fig. 14: Stakeholder analysis of Mavrovouni [own work, 2024]

Scientific and Societal Relevance

Studies on child-friendly design are quite frequent, but are in almost all cases applied to the city. Much less attention has been paid to child-friendly design in combination with a temporary refugee camp. Additionally, the role of play in fostering a sense of home remains understudied in existing research. This thesis aims to fill these research gaps. The research provides insights into how the built environment can be designed to support the well-being and development of vulnerable populations, particularly children. This research integrates perspectives from various disciplines, including psychology, urban planning, pedagogy, art, and social sciences. This interdisciplinary approach contributes to a more comprehensive understanding of the challenges faced by displaced children and the potential solutions that can be implemented.

For the broader society this research may have a strong influence on humanitarian aid. This research can contribute to improving camp conditions and upholding fundamental human and child rights. As flows of fleeing people are expected to increase due to political conflicts and climate disasters, creating temporary camps that cater to the needs of all ages, including children, gets more and more crucial. The outcomes of this research can be used to advocate for and to design temporary homes for displaced people.



Playing

The focus concept in this thesis is 'playing', which according to Dutch cultural historian Huizinga [1952] lays at the core of every human being; the homo ludens. Huizinga defines play as "a free activity, which is recognized as not being serious and outside ordinary life, but which nevertheless can completely absorb the player; an activity connected with no material interest or acquisition of profit; which proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner; which promotes the formation of social groupings that tend to surround themselves with secrecy or to stress their difference from the common world by disguise or other outward signs." [1952, p.14]. Play also involves chance, people compete in order to win. Within the established rules of play, tension and uncertainty occurs. Huizinga categorizes the various expressions of play into two main types: a contest for something or a performance of something. Concluding, the 10 attributes mentioned by Huizinga are illustrated in figure 15. No profit is gained by play is reflected in 'purposeless'. Although play is proven to be very useful for learning and development of children, for children themselves it is just about the fun [Huizinga, 1952].

By playing, children create freedom to escape reality and the rules of normal life. The excitement of playing arises from the possibility to change our experience of daily life. Thereby, playing has an adaptive function, it can learn children to adjust to changing life circumstances [Singer, 2013]. These two facets of play emphasize the potential of play for displaced children. This potential goes for urban design as well, play should be taken far more seriously as it can bring people together [Lefaivre and Döll, 2007].

Joost van Andel [1985] defined four main play types: fantasy, construction, movement and rest. Fantasy play taps into imagination, with children acting out adventures from their minds. Construction play involves building with natural elements. Movement play engages motor skills through physical activities like running and climbing. Rest, seemingly contradictory to play, includes looking and hanging around.

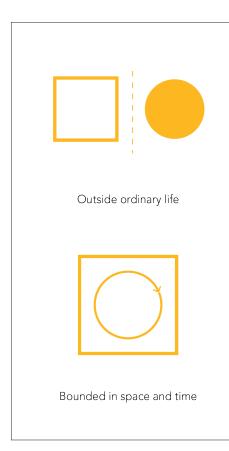






Fig. 15: Characteristics of play [own work, 2024; based on Huizinga, 1952]



Fig. 16: Andel [1985] defined four types of play, the collages depict play objects in these categories [Own work, 2024].

Child Development

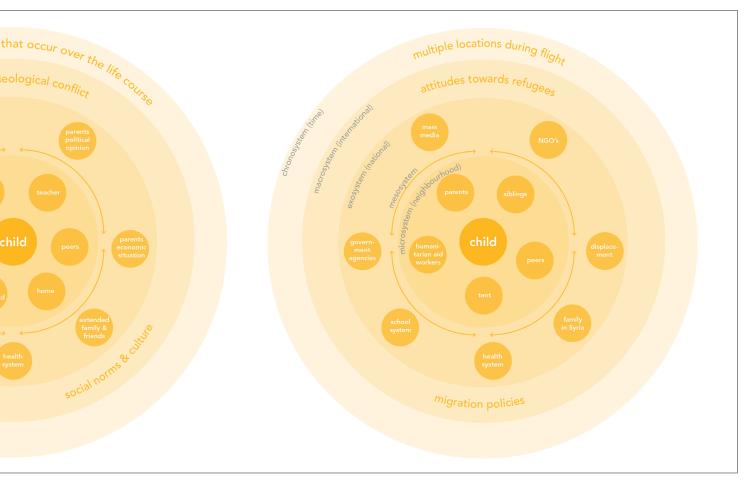
For further understanding of play, the environment in which it takes place has to be addressed, both the physical and social environment. "The ecology of human development is significant for play as play is an activity where the child is active and contributes to create relations with other people and develop the child's language, thoughts and feelings." [Vickerius & Sandberg, 2004, p. 208].

The ecological model of Bronfenbrenner [1979] shows how the development of a child is influenced by interconnected environmental systems. The microsystem is the most influential, it is the immediate physical environment where the child lives and has direct interactions. For most children, their home, with its physical structure, resources, and family relationships represents the microsystem. Home significantly shapes the child's early development and experiences. A positive home microsystem nurtures healthy growth, while an unstable or deprived one can hinder their development.

The exosystem and macrosystem impact the child indirectly. The exosystem relates to the characteristics of social structures that shape their microsystems. The macrosystem deals with broader societal and cultural beliefs, norms and conditions. These three systems are not exactly the same as spatial scales but can roughly be classified as such. The mesosystem is an exception, this involves interactions between the actors of the microsystem. The chronosystem can be seen as the time dimension, the important events or changes during the lifespan. In the diagrams [Fig.17] the situations before the flight and in the refugee camp are shown.



F



g. 17: Ecological development model contextualized for displaced children [own work, 2024; based on Bronfenbrenner, 1979]

Home

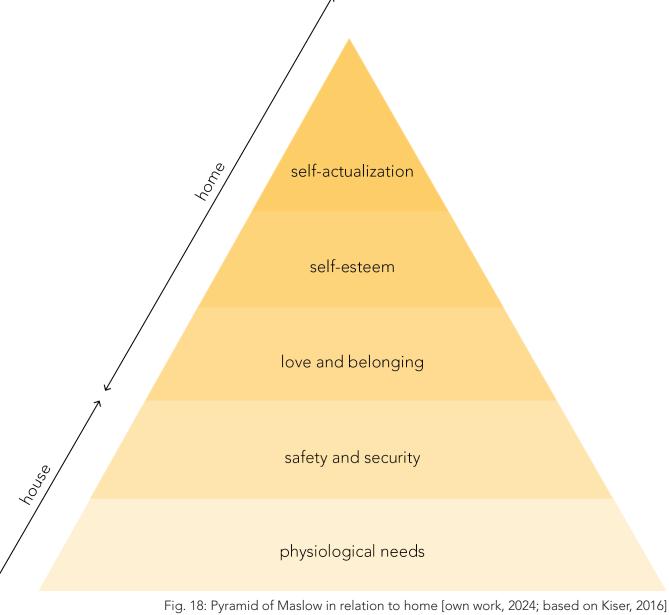
In the dictionary home is defined as:

"1 place where you live; 2 family; 3 where you came from/belong; 4 your country" [Longman exams dictionary, 2006]. This definition does not mention the individual perception or feelings about home. Emotional and experiential dimensions, the personal connection, transform a house into a home [Karjalainen, 1993]. Thus, the concept of home differs from person to person, and is related to peoples backgrounds, cultures and families. Additionally, the definition of home evolves throughout a persons life, influenced by life events that reshape one's perception of belonging [Després, 1991]. This makes it difficult to determine a fixed description.

Home can be seen within the hierarchy of needs pyramid of Maslow [Kiser, 2016]. The bottom two layers of the pyramid [Fig. 18] should be met in every house, before the top three layers can be fulfilled. Després [1991] used Maslows pyramid to identify ten main categories that explain the meaning of home, these are the following:

- 1. Security and control
- 2. Reflection of values and ideas
- 3. Acting upon and modifying dwelling
- 4. permanence and continuity
- 5. Relationships with family and friends
- 6. Centre of activities
- 7. A refuge from the outside world
- 8. An indicator of personal status
- 9. Material structure
- 10. A place to own

These characteristics are barely seen in the context of a refugee camp; residents do not have control, all tents look the same and possibilities for modification are minimal. The whole camp is supposed to be very temporal. The amount of activities in a refugee camp is insufficient, it is often stated as a place of boredom. But, hopefully some relationships with family and friends can be maintained. This underscores the importance to provide in these needs and give a sense of home in the temporal context of a refugee camp.



Home

Home appears to be a very private notion, but Boccagni and Duyvendak [2021] explain that home does not necessarily overlap with its physical boundaries, it starts with having some control over a space. "The material, relational and emotional infrastructures that are constitutive of home as an experience can also be (re)produced in different environments" [Boccagni & Duyvendak, 2021, p.3]. Thus, a sense of home can be claimed and embedded in the public space as well. The drawing of camp Mavrovouni [Fig. 19] reflects how the public space is part of the home of the child.

Three emotions are critical in our perception and experience of home:

- 1. Safety: a material sense of shelter and protection as well as experiencing order and continuity
- 2. Belonging: attachment with a place and the people by extended and repeated interactions
- 3. Agency: free choice over one's daily routines and circumstances in the environment

[Boccagni & Duyvendak, 2021].

For immigrants, their sense of what home means can become blurred due to the impacts of migration. It is crucial for their identification and integration to maintain connection to their past home, also locally. However, the length of stay within a certain place influences home-making. Long-settled citizens have a sense of home in the outside more easily, because they are more attached to the place. Apart from place-attachment, a sense of home can be negotiated by possibilities for claiming visibility and ownership over space [Boccagni & Duyvendak, 2021].





Fig. 19: Drawing of home in RIC Mavrovouni by a child [Van Vianen & Van Elst-Sjitsma, 2024].

[There is nothing more permanent than the temporary - an ancient Greek saying]

Refugee Camp

As described in the definitions, refugee camps are temporary facilities to protect people who were fled their homes due to human or natural disasters and provide in their basic needs [UNCHR, n.d.]. Although these camps are set up to be temporal, in a lot of cases they will exist for years. In the case of Lesvos [Fig. 20], the camp is a transit camp, it is not a destination. People are waiting to be approved in their refugee status. Mostly they travel to a secondary camp in Greece and maybe towards another place in Europe.

Most refugee camps are located outside cities, isolated from amenities and the local community and culture. The centre itself does not have any identity or social meanings, it is a non-place. When someone enters a nonplace, he is stripped of his former identities. In the case of the camp, he only gets the label refugee [Diken, 2010]. The refugee is a homo sacer; a person whose life is stripped of cultural and political forms. The refugee is banned from society, "the idea of exception permeates every aspect of refugee life" [Diken, 2010, p.87].

These non-places are spaces of liminality. This concept refers to the state of being "in-between", which encompasses several components:

- Socio-spatial liminality: refugees are displaced from their home cities and communities and they are neither at their final destination
- Temporal liminality: refugees are stuck in a prolonged period of uncertainty, caught between their past lives that have been disrupted and an unclear future
- Legal liminality: they are not anymore citizens of Syria and not yet of Greece and thus lack full rights and protections

This liminal existence is marked by instability, insecurity, and vulnerability as refugees navigate between "what was" their previous lives and "what is" their current uncertain situation in camps, as well as the unknown of "what will be" their future [Boeren, 2021].





Fig. 20: CCAC Mavrovouni [Greek Ministry of Migration and Asylum via Refugee Support Aegean, 2023]

Topia

The concept of topia derives from the term "topos" originates from the Greek word $\tau \acute{o}\pi o \varsigma$ (tópos), which literally means "place" or "location" [Kontokanis, 2024]. The journey can be viewed as a sequence from a dystopia, along a heterotopia, to a utopia. To explain why this is the case, the definitions of these concepts will be given.

A utopia is an imaginary perfect place or society, it is a paradise where everyone is supposed to be happy. The term utopia was introduced by Thomas More in 1516, it derives from the Greek word for no place, outopos. Nowadays in most debate about utopias, the term is accepted as perfect world. This comes from the similar-sounding Greek word eu-topos, which means good place [Acuna & Bleasdell, 2019]. In this thesis, the definition for utopia also includes this idealistic aspect. An utopia will be defined as an imaginary perfect world portrayed as perfect.

A dystopia is according the opposite of an utopia, it is still imaginary, but an undesirable and frightening place. It comes from the Greek dustopos, meaning bad place. In literature it is characterized by human misery, diseases, authoritarian control and negative societal conditions. For this thesis the following definition will be used: an imaginary miserable world.

A heterotopia is a place of otherness. This is defined by six principles, described by Michel Foucault [1986], these are:

- 1. All cultures constitute heterotopias, but they can be classified in two types:
 - Heterotopias of crisis: sacred or forbidden places for individuals in a state of crisis (e.g. adolescents, pregnant women, the elderly)
 - Heterotopias of deviation: places where behaviour outside the norm can be exercised (e.g. psychiatric hospitals, prisons)
- 2. The function of a heterotopia is not fixed, but can evolve over time as the culture changes.
- 3. Heterotopias have the power to juxtapose several incompatible real places or emplacements in a single real place.



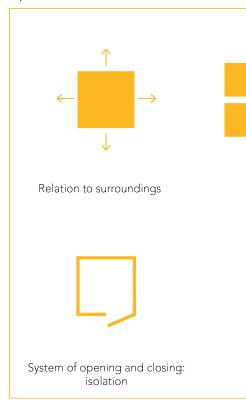
Fig. 21: Island of Utopia, illustration by created for the book of Thomas More in 1516 [Wikimedia Commons]

Topia

- 4. Heterotopias are linked to slices of time they can either accumulate time (e.g. museums, libraries) or be transitory (e.g. fairgrounds).
- 5. Heterotopias have a system of opening and closing that both isolates them and makes them penetrable. This can be a physical system (gate, bridge) or a ritual (washing feet before entering a mosque).
- 6. Heterotopias have a function in relation to the surrounding space, either creating an illusionary space or a space of compensation.

To put it short, "Utopia is a place where everything is good; dystopia is a place where everything is bad; heterotopia is where things are different" [Mead, 1995, p.13].

Spatial characteristics



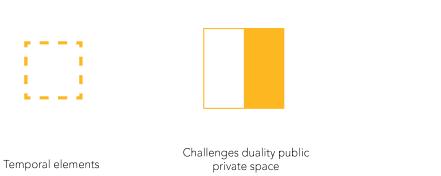




Prison Cemetery Military camp Ghetto

Abort from 'narral' assists. Alternative from every day life.

Repetitive elements Juxtaposition Apart from 'normal' society





Other characteristics

Heterotopia → Utopia

Hospital Boarding school Ship Subway station Retirement homes Gated community Theatre Museum Library Garden Honeymoon Festival Playground Holiday park Theme park

Fig. 22: Characteristics of Heterotopias [Own work, 2024; based on Foucault, 1986]

Heterotopia Refugee Camp

In the journey the home that is left behind is a dystopia, as it is destructed by the war and the daily life is full of fear. A dystopia is normally imaginary but in this case, it is reality. People leave this place behind, seeking for their utopia. They imagine a perfect place of safety and opportunity. However in this case the imaginary aspect is correct, their hopes do not come true. There is a disconnect between their dreams and the actual conditions they encounter.

Instead they arrive at a heterotopia, the refugee camp. This serves as a waiting space, in relation with the place of leaving and the intended destination. The heterotopic reading of subway stations by Khan and Ahsan [2024] shows significant similarities with the refugee camp. The created model [Fig. 23] employs this metaphor. The camp is 'severed from the city's everyday rhythms', features 'controlled points of entry and exit', and its repetitive actions create a sense of monotony. It is a transit space characterized by liminality and boredom [Khan and Ahsan, 2024]. The other heterotopic principles of Foucault [1986] apply to the refugee camp as well. These spaces house people in crisis, whose identities shift from civilians to refugees. Their function can change over time, as societal perceptions of refugees fluctuate. In relation to their surrounding environment, refugee camps form a parallel society within the dominant social order.

Right now, refugee camps are characterized by inhumane conditions and can be seen as spaces of total rejection. Although there are international laws and treaties, these regulations are often ignored. Refugee camps are similar to concentration camps, they both house people without rights, without being citizen in a nation, without laws. The refugees can be called heterotopians, they represent otherness and exclusions from normal society. While refugee camps should be a sanctuary, a safe haven without the violence of society, where human rights still should be met. The concept of heterotopia could be relevant as counter-strategy against the current form of refugee camps. Heterotopias should be spaces of mediation, with relation to their surrounding society [De Cauter & Dehaene, 2008].

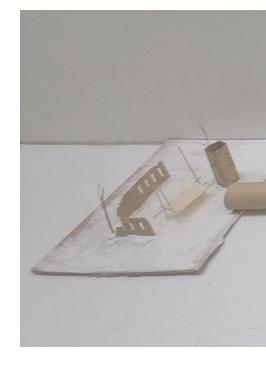




Fig. 23: Conceptual model of ref







ugee journey, from dystopia along heterotopia towards utopia, the metrostation is a metaphor for the camp [Own work, 2024]

[Pitsikali & Parnell, 2019, p.719]

Heterotopia & Play

De Cauter and Dehaine [2008] describe the analogy between play and heterotopias. The previously described characteristics of play and heterotopias are compared in Figure 24. Six pairs of characteristics can be distinguished, the grey box shows the remaining aspects.

Firstly, heterotopias and play both exist outside daily life, serving as counter-sites that reflect and contest the ordinary. While play occurs as an act separate from routine existence, heterotopias manifest as physical spaces that disrupt conventional reality.

Secondly, repetition is a key element in both concepts. In heterotopias, recurring elements establish order and structure, much like the repeated actions and patterns found in play.

Thirdly, both play and heterotopias are constrained by spatial and temporal boundaries. Games have defined physical limits and specific durations, while heterotopias are characterized by distinct spatial borders and temporal elements.

The entry into a heterotopia or a game involves an implicit understanding of expected behaviours. In heterotopias, there are unspoken rules governing conduct, while games often have explicit rules, particularly in organized sports.

Furthermore, both play and heterotopias function as separate entities from normal society. Games possess a secretive or exclusive nature, creating a division between participants and non-participants. Similarly, heterotopias operate independently from conventional social structures, offering a unique space for alternative experiences.

Lastly, play and heterotopias share an inherent tension with conventional life. They challenge established norms and offer opportunities for transformation and reflection.



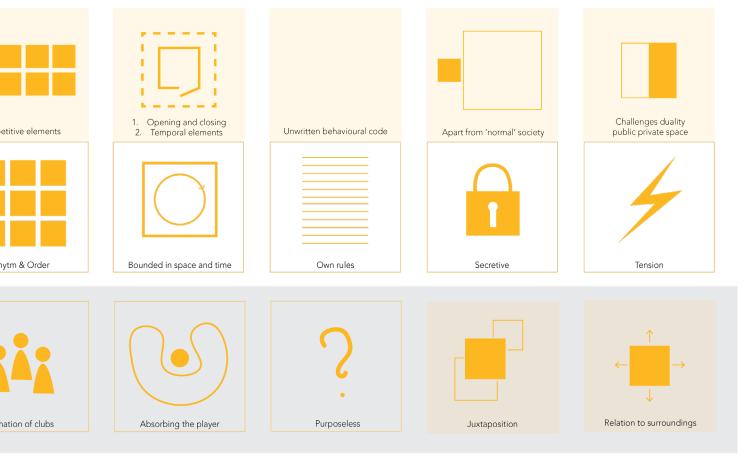


Fig. 24: Comparison characteristics of play and a heterotopia [Own work, 2024]

Reflection on Theory

The refugee is conceptualized as a homo sacer, who is banned from society and deprived of all political and legal rights. However, every human being is also fundamentally a homo ludens - someone for whom play is a basic need and voluntary activity separate from the routines of daily life.

Refugee camps exemplify Foucault's heterotopias - contested spaces of exclusion. This thesis aims to reimagine the refugee camp as a new kind of heterotopia - a "playful camp" that centres the homo ludens rather than reducing refugees to the bare life of the homo sacer. Through the transformative power of play the camp will become a place that transcends its liminality.

For the sake of this project a term for home in the public space is thought of; *nostopia*. This term blends the Greek words nostos and topos. Nostos means returning home and topos means place. The narrative of the journey of topias will be altered by re-envisioning the refugee camp as a nostopia instead of a heterotopia. This is the answer to the sub-question; How can the concept of topia benefit re-envisioning the refugee camp in relation to home and play?

Nostopia

/npsˈ təʊ.pi.ə/

noun

- 1. A public space, building, or environment designed to evoke a sense of safety, belonging, and agency reminiscent of being at home
- 2. A place with a home-like atmosphere in a non-residential setting
- 3. A playce that feels like home

Etymology:

derived from the Greek words nóstos "coming home" and topos "place"

Heterotopia Theme Park

Theme park the Efteling in the Netherlands has as slogan "World of Wonders", perfectly combining the concepts play and heterotopia. It invites visitors into a place of imagination existing outside everyday life. The other combined characteristics of play and heterotopia are visible as well:

- It is bounded in space and time by fences and opening hours
- The Efteling has its own behavioural rules
- It is spatially apart from normal society, a ticket is required for entry
- Efteling challenges the duality of public and private space by creating a tension between the shared space and the personal experiences
- It includes repetition, for example through rollercoaster rides

The visualization of Efteling, as depicted below, embodies this playful narrative, challenging conventional ways of presenting spaces.



Fig. 25: Map of theme park de Efteling [De Efteling & Ruys, 2014]



Conceptual Framework

The conceptual framework visualizes the interrelations between the concepts home, topia, play and migration in this thesis. The whole thesis is placed in the context of migration, the stops of the journey are on this path. However, two axes can be distinguished. On the horizontal axis the route from dystopia to utopia is shown, this is the background knowledge. The vertical axis shows the aim for the design in this thesis, the intervention area, the goal is to move from heterotopia towards nostopia. The home of a child is characterized by safety, agency and belonging. But right now, these features are under pressure by the consequences of migration. Uncertainty of the living situation makes it difficult to have agency, adverse childhood experiences make it harder to have a sense of safety and displacement is contradictory with a feeling of belonging.

In essence, a home environment should provide a familiar, safe, and resourceful space for children's natural tendency towards play. This thesis aims to use play as a tool towards the nostopia, this focus is emphasized by the central location of play in the framework.

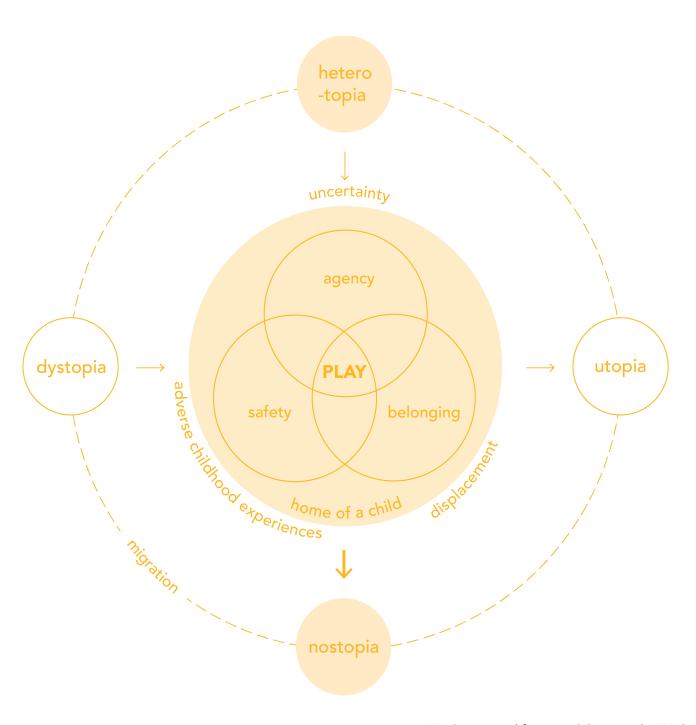


Fig. 26: Conceptual framework [own work, 2024]

Methodology

The theories and methods that are used in this thesis are interrelated. This is shown in the diagram on the right [Fig. 27].

The two yellow blocks depict the main literature themes; the refugee journey and environmental psychology with a focus on children. These theoretical blocks influenced the spatial analysis of the three stops of the journey. The environmental psychology theories influenced the ethnographic research at the field trip, the use of space, play behaviour and meaning of home was put central.

Both the outcomes of the field trip and the spatial analysis influenced the design of the pattern language as well as the envisioning of the nostopia.

Preliminary Research Methods

Literature Review

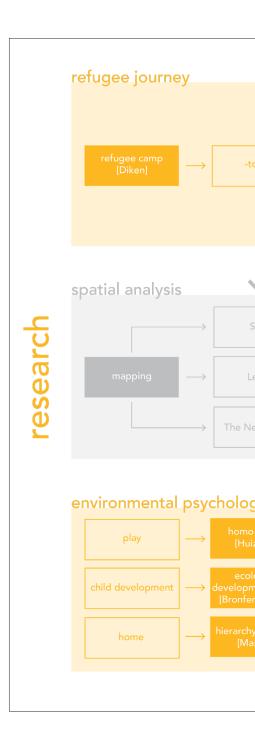
The concepts of home, play and topias are already explained in the theoretical framework. These theories form the backbone of the project, especially through the resulting concept of nostopia, which serves as a design goal of this project.

Making Conceptual Models

By creating a 3D visualization, more insight can be gained into the meaning of topias in the context of a refugee journey. The conceptual model translates the abstract concepts into a tangible image.

Spatial Analysis

Spatial data needs to be collected and mapped to execute the spatial analysis. For the three locations of the journey the spatial characteristics will be compared. The spatial analysis of the camp will be most extensive, as that will be the area of intervention. The strengths and challenges of the camp environment will be most important for the design.



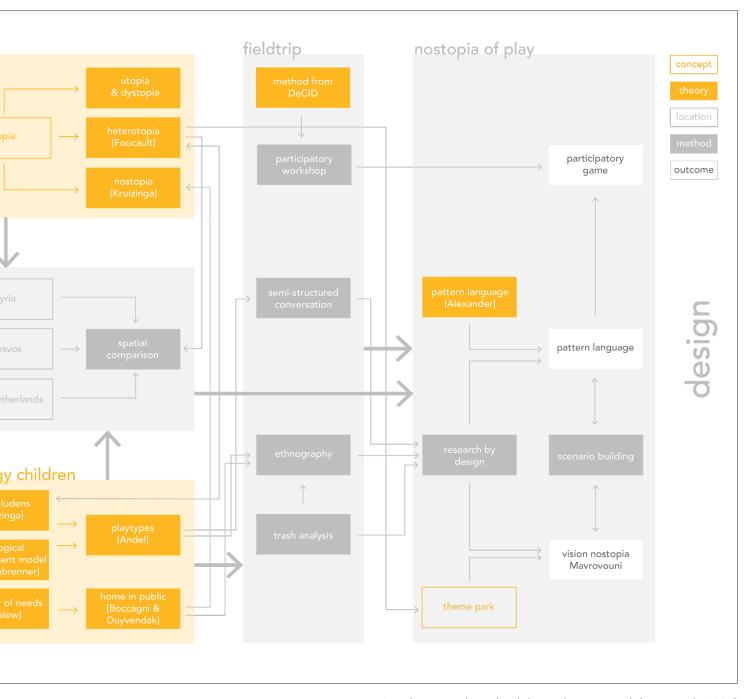


Fig. 27: Theoretical-Methodological Framework [own work, 2024]

Methods Field Trip

During the month long field trip several research and investigation methods were used to acquire information and a deeper understanding of the living situation as a displaced person and child.

Ethnography

By stepping into the community, the researcher aimed to gain insight on the daily life of displaced people, focusing on two things:

- 1. The living environment, especially around the concept of home in the camp context, including the appropriation of space.
- 2. Play behaviour of children and their spatial manifestation.

This is a method of open-ended inquiry, thus the documentation manifested in diverse ways, like sketches or notes.

Participatory Design

By including refugee children in the design process, their needs can be uncovered, while they are empowered as valuable people as well. Children can express themselves easily through art [Chawla et al, 2018], several tools specifically for including displaced children are mentioned in the DeCID handbook [Rigon et al, 2021]. During the field trip the workshop visioning play [Fig. 28] will be used. Through a guided visualisation, children create visionary artworks of their desired future playground by using their play memories.

Semi-Structured Conversation

During the work in the education team a semi-structured conversation was conducted to gain more insight in the play needs of the displaced children, based on opinions of experts, the teachers.

Trash analysis

Street trash in camp was taken home to get more insight in the daily life of residents of Mavrovouni.



Visioning Play

Visioning activity developed by CatalyticAction

Visioning Play is an activity in which participants' memories of play spaces are initiated in order for them to create visions of their desired future playground, expressed through art making. Children affected by displacement might not have had opportunities to enjoy play spaces, or might have experienced traumatic events such as the loss of friends and family members or the destruction of their homes or other spaces where they used to play. A guided visualization led by the facilitator can engage participants' imagination as they navigate memories, in order to dream and reach new ideas.

Tip: Throughout the session, be sensitive to the children's individual situations, and conscious of images you choose, what associations they might trigger and how you discuss them. Images that are associated with memories of war such as destruction, small dark rooms, and loud sounds may cause traumatic memories to resurface in children who have experienced displacement. It is helpful to have a professional's support.





Purpose:

For participants to create their individual vision of the playground



Duration: 50 minutes



Group size:

Ideally up to 15 participants with one facilitator, up to 30 participants with two facilitators



Suggested Age:

V

Materials:

Papers; Pencils; Crayons; Glue stick; Scissors; Printed texture templates; white board, flipchart or large papers; markers.



Space:

This activity works best in a classroom with desks or tables for drawing and collage.

Design Methods

Making Conceptual Models

The first step of the design phase was translating the findings from the field research into a conceptual model. This model embodied metaphors for the new camp vision, and was used as communication tool.

Pattern Language

Christopher Alexander introduced the pattern language in 1977 as a systemic approach to designing spaces. This structured set of design solutions addresses common spatial challenges, translating research into practical implications backed by evidence. The patterns can be categorized based on scale, values or themes, a pattern field can visualize their interrelations. A pattern language is a playful yet structured method for designing living environments, encouraging exploration and adaptability. It empowers both professionals and non-professionals to collaborate using a common vocabulary, allowing residents to influence their surroundings. This approach challenges the one-size-fits-all solution by encouraging unique pattern combinations tailored to specific needs and characteristics of different environments. It addresses the fundamental question whether one has the right to shape their own environment [Tan, 2014].

Research by Design

This method integrated the creative process of designing with systematic research practices. For example an objective tree was created, to break down the intangible objectives into more concrete goals. This method occurred mainly through sketching to explore the spatial implications of the patterns could. Through iterative experimentation with the patterns applied to the context, the vision of nostopia Mavrovouni was developed.

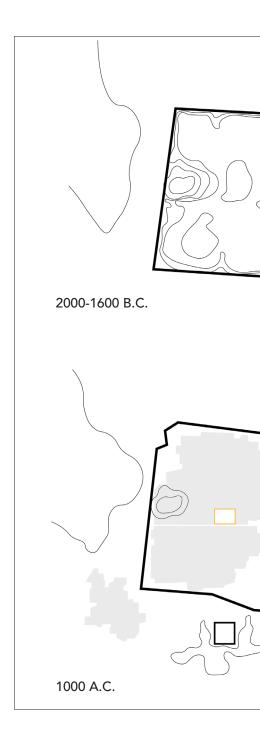
Scenario Building

By using the design objectives and patterns, possible futures are envisioned, exploring extreme possibilities creatively to inspire innovative solutions. This approach encourages out-of-the-box thinking while grounding ideas in structured analysis. The insights generated can effectively inform guide decision-making of the final design.



Aleppo | Development

The maps on the right [Fig. 29] show the urban development of Aleppo. The city developed around the citadel on the hill. Located on top of the hill, the citadel remains a prominent landmark visible from much of the city and holds significant historical and cultural value as a key element of Aleppo's identity [IUAV-WAVE summer workshops, 2017]. The other noticeable element is the big mosque with inner square, which, along with the citadel, serves as one of the city's most important gathering spaces. The city began as a fortified settlement, and remnants of these fortifications are still visible, although the urban fabric now extends beyond the original city walls [IUAV-WAVE summer workshops, 2017]. These walls reflect one of the heterotopic characteristics: a system of opening and closing.



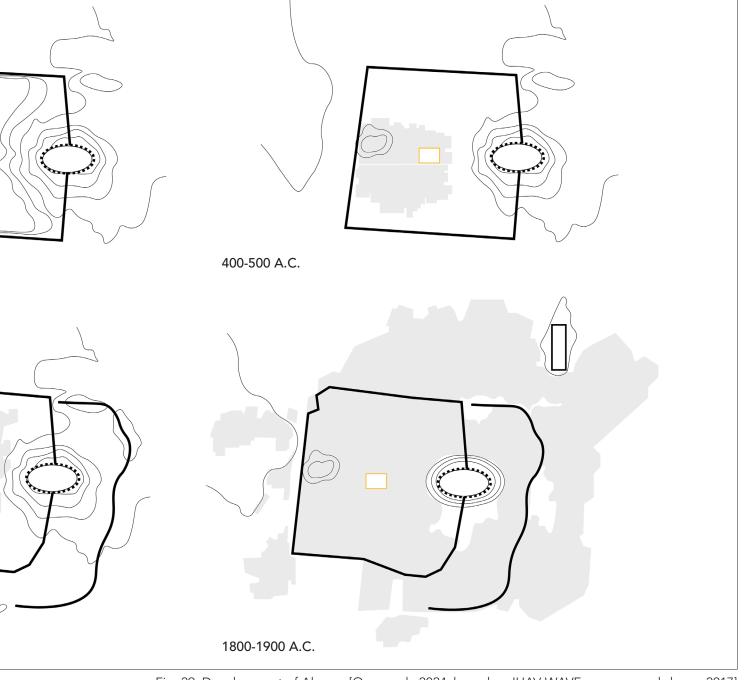


Fig. 29: Development of Aleppo [Own work, 2024; based on IUAV-WAVE summer workshops, 2017]

Aleppo | Public Space

The map shows the public spaces of Aleppo, it is an adaptation of a Nolli map. A typical Nolli map shows private spaces in black and public spaces in white, but in this version the private spaces are cut out. This map shows that significant portion of the city exists of public buildings. The yellow ones serve a religious purpose, these are mainly mosques. The other buildings are mainly souks, traditional roofed markets. Both the souks and markets are places of meeting, fostering social interaction within communities of Aleppo [IUAV-WAVE summer workshops, 2017].

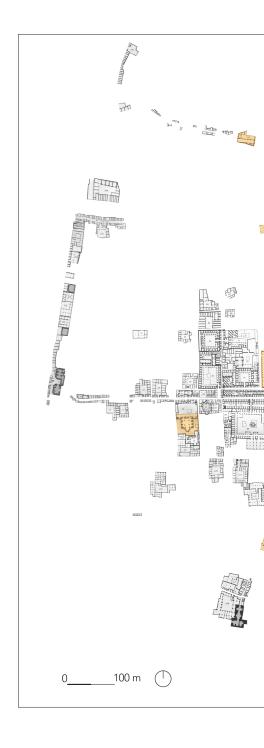




Fig. 30: Nolli map Aleppo with souks and mosques [Own work, 2024; based on IUAV-WAVE summer workshops, 2017]

Aleppo | Urban Fabric

These two pieces of urban fabric reveal an organic, unstructured development pattern, although Homs exhibits a higher density compared to Aleppo. This organic fabric reflects how these cities were shaped over time by their residents, evolving in response to social and cultural needs, rather than following a predetermined urban plan.





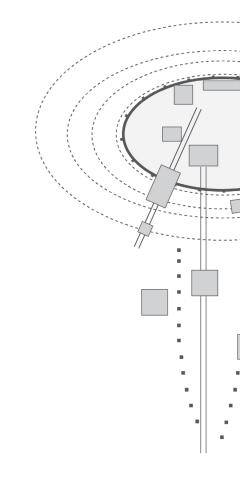


Fig. 31: Urban fabric in respectively Aleppo and Homs [Own work, 2024]

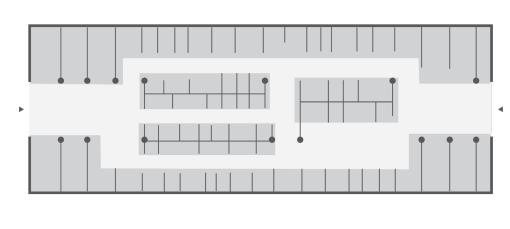
Aleppo | Public Buildings

The most important public places in the city of Aleppo are the citadel, the mosques and the souks. The buildings are mainly structured around an inner courtyard or passage. These spaces form a transition from outside to inside, in between public and private. This gradation of spaces is also known as territorial depth. Another characteristic of these spaces is the use of columns. The columns are positioned linearly, serving as a boundary that frames and defines the open areas.

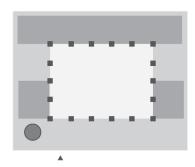
Citadel of Aleppo (Kasbah)



Souk of Aleppo (Market)



Traditional Mosque Aleppo





Aleppo | Housing

In Aleppo the traditional house has a centrally located inner courtyard just like the public buildings. This courtyard is well adapted to the climate [The traditional courtyard house is well adapted to the climate [IUAV-WAVE summer workshops, 2017]. Around this courtyard the private rooms of the house with different functions are situated. The courtyard functions as the transition space from the public street to the private room [Aboudan en Hacihasanoglu, 2018].

The Majlis are an important communal space, a sort of living room, for Syrian homes. In this type of space, guests are welcomed. People gather around a heat source, sitting on the ground on cushions. These rooms form a transition space as well, in between the most private rooms of the house and the public street. In some cases they have a door to the public street as well [Enab Baladi, 2021].

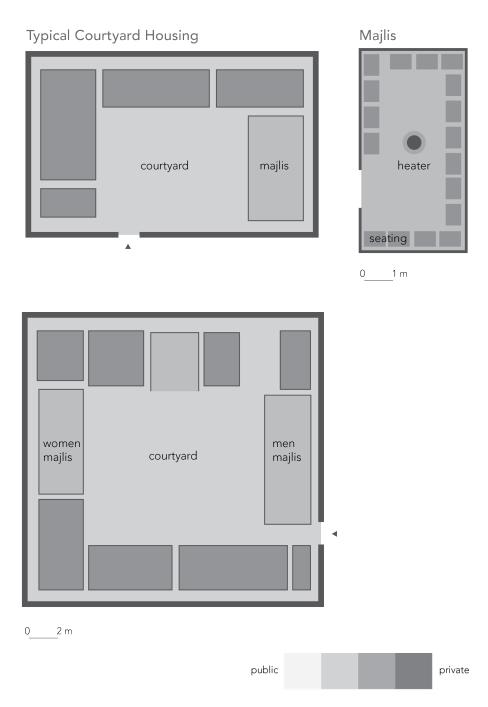


Fig. 33: Typical Syrian housing and their level of privateness [Own work, 2024]

Lesvos | Geography

As depicted in the map on the right, the location of Lesvos and several other Greek islands in close proximity to the Turkish mainland is noteworthy. The island of Lesvos, along with Chios, Samos, Leros, and Kos, are highlighted as significant 'landing locations' due to their geographical position and Greece being part of the EU.



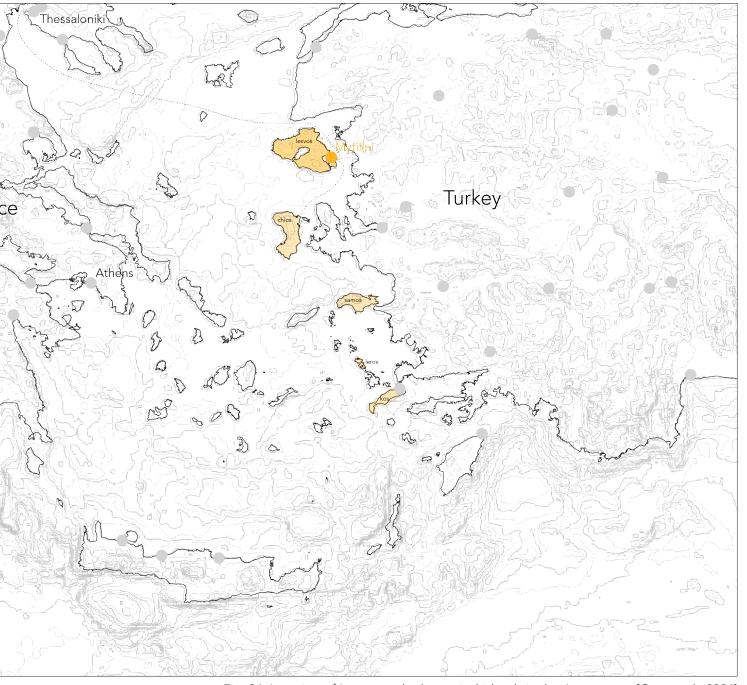
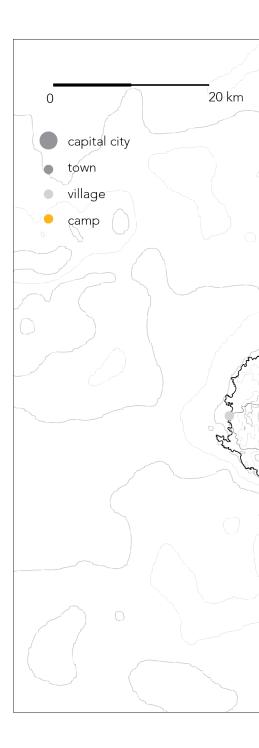


Fig. 34: Location of Lesvos and other arrival islands in the Aegean sea [Own work, 2024]

Lesvos | Topography

The major city of the island of Lesvos is Mytilini, which is close to the location of refugee camp Mavrovouni. The height differences on the islands decrease the reachable distance, especially for refugees who have to walk to facilities.



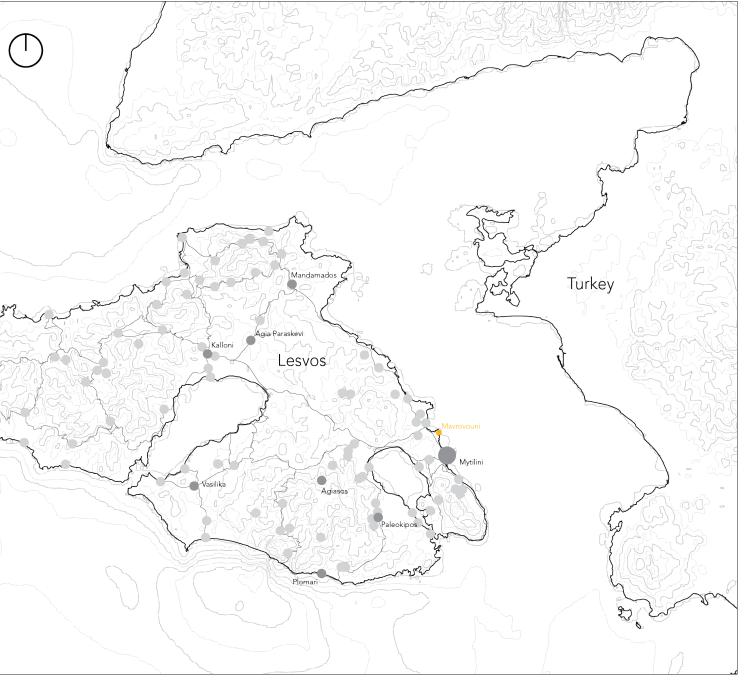


Fig. 35: Lesvos with height differences and main towns [Own work, 2024]

Lesvos | Walkability

Nearby the camp there is a Lidl supermarket, but for other shops or [religious] facilities, one needs to go to Mytilini. The yellow area on the map shows what area can be reached in half an hour, the amount of facilities within is limited. The walk to Mytilini takes approximately one hour.



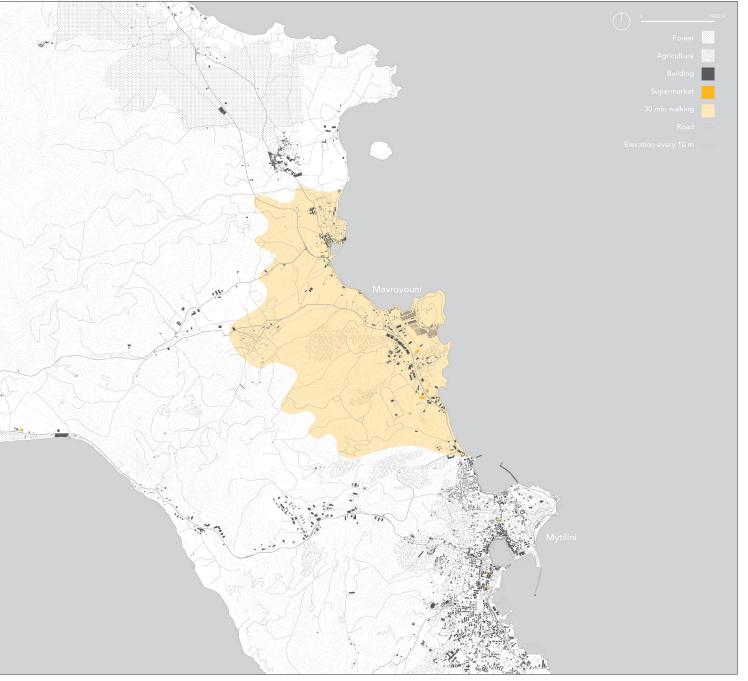


Fig. 36: Location of Mavrovouni in relation to capital city Mytilini [Own work, 2024]

Lesvos | Development

The camp developed from a military shooting range into a temporal and now quite permanent refugee camp. The military road structure largely remained the same, but follows the organic lines, due to the hill structure on the camp site.

It is striking that on the former firing range, tents are depicted now [Human Rights Watch, 2020]. This history has left a concerning legacy of lead contamination in the soil. This toxicity poses significant health hazards, particularly detrimental for young, developing bodies and brains. Children are most vulnerable due to frequent hand-to-mouth behaviours and playing directly on contaminated ground [Brubakk et al, 2022].





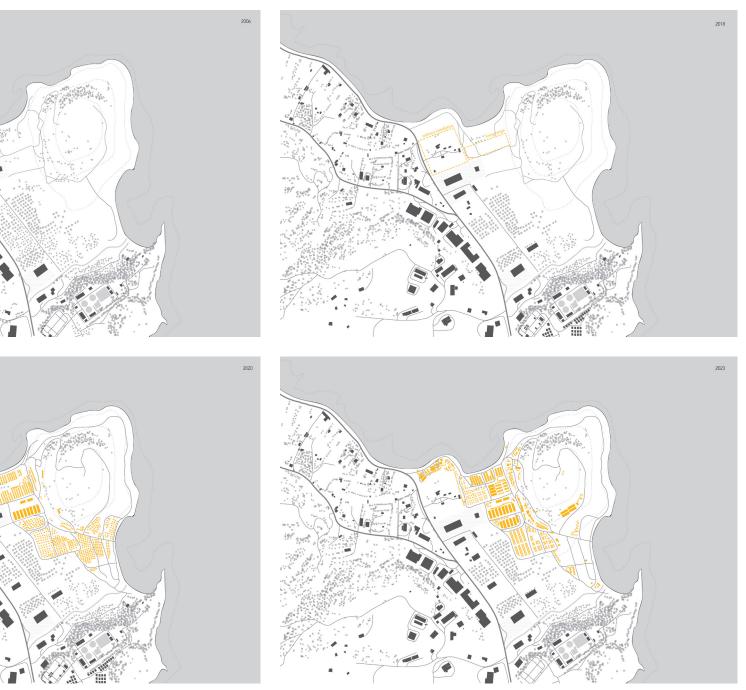


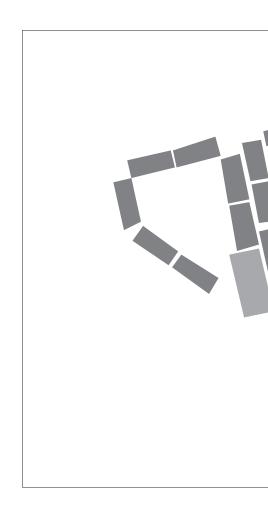
Fig. 37: Development of Mavrovouni from shootingrange to Closed Controlled Access Centre [Own work, 2024]

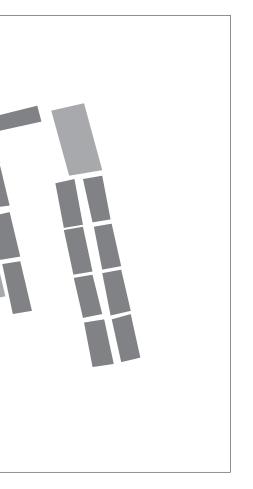
Lesvos | Camp Fabric

Worldwide refugee camps are planned top-down, resulting in easy manageable structures. The camps are supposed to be temporary, the grid structure serves the quick removal [AlWaer et al., 2023].

For camp Mavrovouni the same goes, the majority of the tents are positioned in a grid structure. The transition from private to public space is quite rigid. The spatial layout of the camp follows a military-style hierarchy, an ironic choice considering the site's history as a former shooting range. Only the containers with sanitary facilities are placed in a courtyard formation.

This layout emphasizes order and control and fails to address the cultural and social needs of the residents. The modernist approach to camp planning neglects the principles of privacy and harm that are deeply rooted in Arab-Islamic culture. The gridded street pattern, though common in humanitarian camps worldwide, limits opportunities for social interaction and livelihood development, which are crucial for the well-being and resilience of camp residents [Williams, 2005].





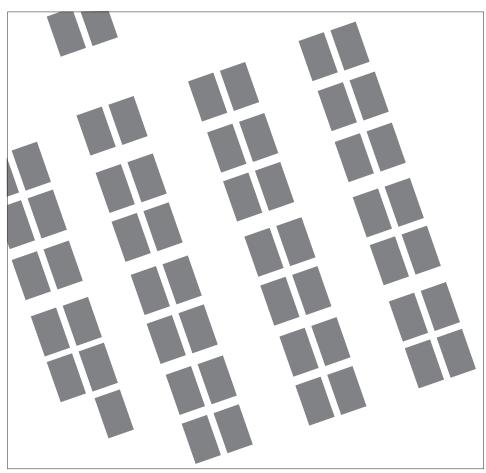


Fig. 38: Camp fabric in CCAC Mavrovouni [Own work, 2024]

Lesvos | Private Housing

The camp has 3 types of shelters:

- Isobox: a container of 18 m2, mostly equipped with air-conditioning. The space is officially designed for 4 people, but in practice more people inhabit them [Van Vianen & Van Elst-Sjitsma, 2024].
- Refugee Housing Unit [RHU]: a plastic tent of 17 m2, they are isolated and have electricity, but no air-conditioning. The space is officially designed for 4 people, but in practice more people inhabit them. [Van Vianen & Van Elst-Sjitsma, 2024].
- Rubb-Hall is a big plastic tent of 340 m2. Some of them have panels to create 18 separate rooms, offering space to 8 persons, although only 4 is allowed. The units have electricity, but short-circuit often causes fire.
 Some Rubb-Halls are just big open spaces, used in case of high influx of refugees [Van Vianen & Van Elst-Sjitsma, 2024].

The isoboxes, RHU's and rooms in Rubb-halls do not have separate spaces within. One large 'room' is shared with the whole family. Thus, the transition from public space to private space is hard.

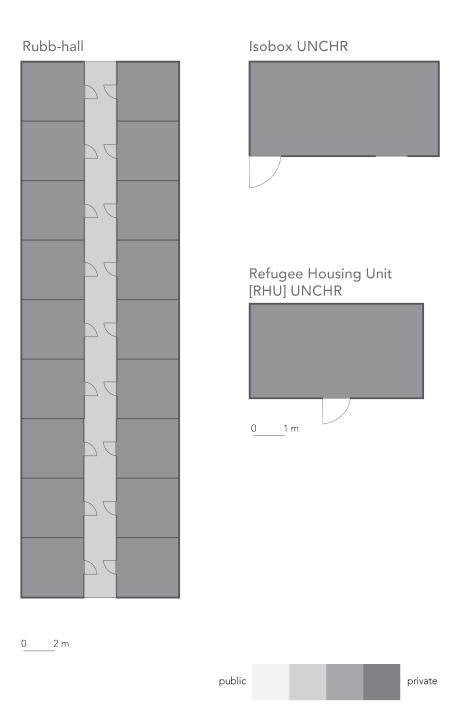


Fig. 39: Interior of the tents and their level of privateness [Own work, 2024]

Lesvos | Climate

Lesvos enjoys a hot-summer Mediterranean climate, Csa in the Köppen climate classification. The annual average temperature is 18°C, extreme temperatures are rare. Summers are dry and hot, with temperatures of around 30°C, this poses a significant danger of forest fires. In contrast, winters are mild but humid. The dry topsoil has poor drainage capacity, making the land prone to flooding during the wetter winter months [Climate Lesvos, n.d.].

The prevailing wind is north-westerly. At the coastal camps, this brings in sea breezes, mitigating temperatures but also increasing the risk of seawater being pushed inland. On this location precipitation will stream down the hill, towards the shelters. This combined with pushed up seawater, makes the camp extra vulnerable for flooding [Ansa, 2020]. Near the shoreline powerful gusts of wind may occur, with high wind speeds. As this location is a peninsula, the wind has a strong influence on local conditions. For example, the wind often brings dust to the camp, decreasing living conditions [Refugee Support Aegean, 2023].

Lesvos' location also exposes it to tectonic activity, with the potential for strong earthquakes to strike.

Within the borders of Mavrovouni, shading is limited due to sparse vegetation, allowing the sun to intensify climatic conditions.



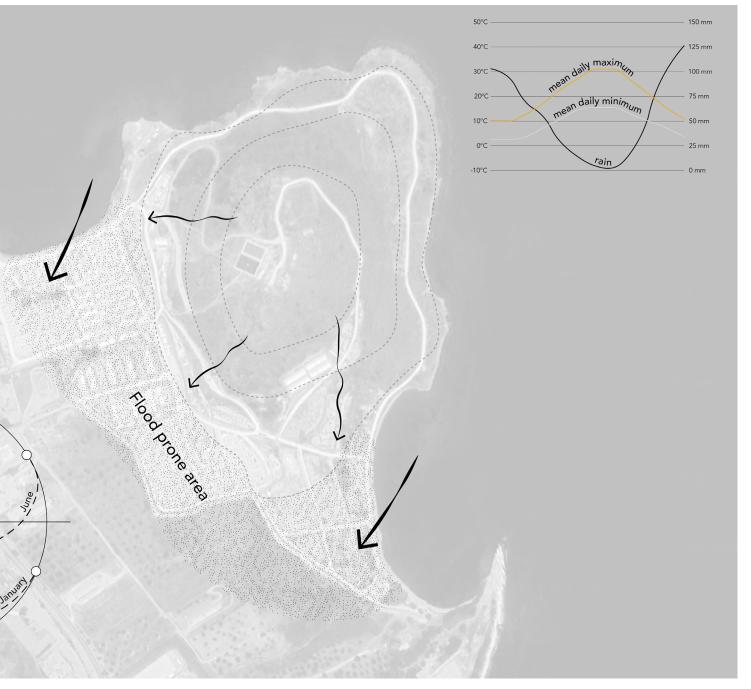


Fig. 40: Climate conditions Mavrovouni [Own work, 2024; based on Meteoblue, n.d. and Sun-Direction, n.d.]

Delft | Walkability

Since September 2022, the city of Delft has been temporarily housing asylum seekers at the Manderspark, on the grounds of TU Delft University [Gemeente Delft, n.d.].

The map on the right shows the neighbourhoods of Delft in white. The yellow areas represent shopping areas. The white square on the bottom right is the temporal asylum centre. The light yellow depicts the area within reach of 30 minutes on foot. It strikes that Manderspark is as far away from the other inhabitants of Delft as possible and shopping facilities are barely within reach.



Fig. 41: Res

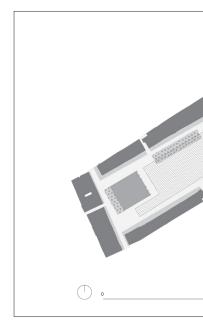


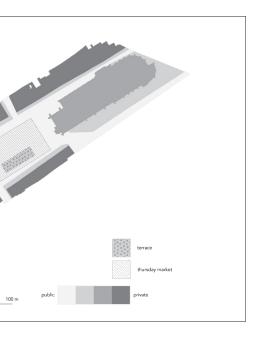
idential and shopping areas of Delft and the location of refugee centre Manderspark [own work, 2024; based on PDOK, 2024]

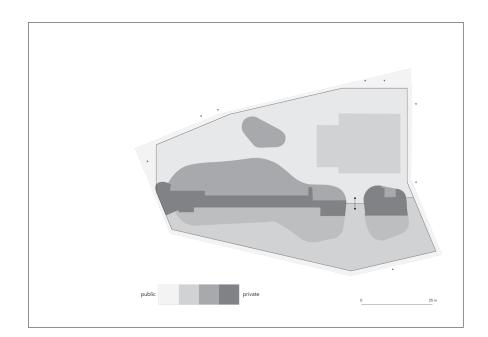
Delft | City Centre

The spatial diagrams on the right show important sites in Delft and a typical house in the historic centre. The transition from public to private is soft, it takes several steps. Typical for this city is 'het Delftse stoepje', this is a small area in front of the front facade. It is made of another stone type, and often has another level than the street. In most cases, the front door can be reached by climbing several steps.

The building which houses the station as well as the city hall gets more private towards the interior. Territorial depth is also visible on the main square, the temporal market adds to this. Thus, the city centre shows gradual differences in public space, several territorial boundaries need to be crossed to enter buildings.







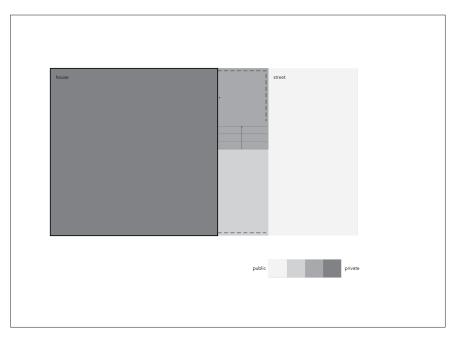


Fig. 42: Market square, city hall and station, typical historical house Delft and their level of privateness [own work, 2024]

Delft | Camp Fabric & Housing

This location has a maximum accommodation capacity of 220 people. The COA is responsible for organizing and executing the refugee housing in Delft [Gemeente Delft, n.d.].

At asylum centre Manderspark the contrast between public and private is more rigid than in the city centre. The camp follows a grid structure again, probably because of the temporality of this location.

The top view from Manderspark could be a piece of Mavrovouni as well, the military layout is quite similar. There is disconnect between the physical environment and the socio-cultural needs of the residents of Manderspark. As stated before, it is important to design culturally-sensitive asylum centres for the well-being of displaced people [Williams, 2005].

At Manderspark the living containers consist of one big room. Each unit houses one family or 4 single adults, thus privacy is limited [De Haan, 2022]. It can be debated whether real private spaces exist in Manderspark.

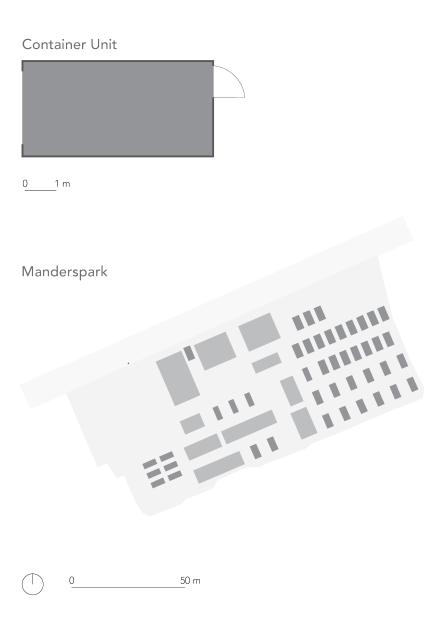


Fig. 43: Refugee centre Manderspark and the level of privateness [own work, 2024]

public

private

Size of a Theme Park

The size of Mavrovouni is around 25 hectares, which is in the same order of magnitude as theme parks, although their sizes vary.

For instance, one of the smallest theme parks in the Netherlands is Drievliet, encompassing only 8 hectares. On the other end of the spectrum, the Efteling, being the largest of the country, encompasses an expansive 72 hectares.

The Efteling also includes two adjacent holiday parks and a hotel, allowing guests to extend their visit over multiple days. This integration makes effective use of the park's substantial size and enhances its appeal as a destination for longer stays. While Mavrovouni initially focused on providing sleeping facilities, Efteling introduced accommodations later as a response to its success. Viewing Mavrovouni through the lens of a theme park reinterprets its development potential.



Fig. 44: Efteling map with accomodations [Efteling, n.d.]



Lesvos | Introduction

The field research was conducted while doing voluntary work under Eurorelief for a month in CCAC Mavrovouni. The first two weeks the work consisted of different tasks, like distributing goods or tickets to the residents, helping at the foodline and doing social outreach; playing games with children. The next two weeks took place in the education team, were I was a teacher assistant in one of the classes.

Although taking photos in camp was barely possible, a small photo report of the field trip can be found in the appendix. In the diary as shown in the picture all ethnographic observations related to the use of space and play behaviour were written down. These observations are digitalized after the field trip, a list of respectively the spatial and the play observations is added in the appendix.



ha een horte dog in karry zit ik nu in de 100 op een Lighed, kilievod noar de 20e. We tijn noet het Moordwisch van het eiland gereden waar ook leuke winkeltjes is streetje weren tijn. Onderwee wed moie wirjelden tijdens de hoarspeldbochen, Jorina read voor het eerst.

We begonnen de Wlunkerbailers is Meeting room schoon te maken vandehend. De puppys haren haret oan het blaffen, dus de helben 2e viggelaten. Het hoh was er viet dus we helben ook de poep gogerhund; het werk is eig divers is her poep gogerhund; het werk is eig divers is her haret weren wirendigd op de hoffie be de man van wilal? Chet meet schodwal betekenen in arebisch. Hij had 3 kinderen bij zich en we as al sinds herwarg op les bos. De avolk twee waren een neisjest tweeling van 11, maar verschillend. Hille Spain is Germany verschillend in hersen hart is wietrijk Lueder hij aan, vig grappig zijn zoon mohobinimed was de en aan betspelan wet kelden met zijn viouis, in lebanon, dre grappi streden met zijn viouis, in lebanon, dre grappi hart is wietrijk Lueder hij aan, vig grappi streden met zijn viouis, in lebanon, dre grappi streden met zijn viouis, in lebanon, dre grappi of wij korden helpen (maar standelike lieden die vietre hood worden helpen (maar standelike lieden die vietre hood worden helpen (maar standelike lieden die voor de verden der de worden der hood worden helpen (maar standelike lieden die voor de verden der de voor de verden de verden de voor de verden der de voor de verden de verde

"The beautiful blue water in our vacation photos is the same water where overcrowded motorboats sail at night. The same water where people lose loved ones or cherished belongings. The €30 ferry that carried us tourists from Lesvos to Turkey makes the same crossing as the rubber boats people without European passports board at night. The beach where we spent a night is the same kind of beach where people arrive, puncture their boats, and flee into the woods. Maybe even around the same time we waded into the water for our sunrise swim. Sharing photos like these feels deeply unfair. Our peaceful relationship with the water, instead of a traumatic one, is pure chance.

Pure grace."

[Translated from Visser; Eurorelief volunteer, 2024]



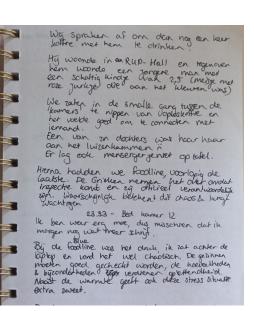




Fig. 45: The volunteers I lived with, my diary and a birthday garland at Moria [own photos, 2024]

Lesvos | Fencing

I walked around Panagiouda one day and wrote down the following in my diary: I took photos of fences, I realised that many gardens also have a separation, but beautiful ones. Fences have sunny colours and twisted metal in pretty shapes. Often there is a low wall, perhaps to keep the dog inside? Fences give a sense of individuality and ownership rather than captivity. Life between cage fences, even though you are allowed in and out, is hard to imagine. What kind of feeling would camp residents have when they walk through Panagiouda?





Fig. 46: Comparative analysis of the fencing in Panagiouda and Mavrovouni [own work, 2024]

"It is confusing, you have to create a new box in your head for this type of place. It looks a bit like a holiday park, but it is also totally different." [Locht; Eurorelief volunteer, 2024]

Lesvos | Mapping

The map shows the 'buildings' and their functions in camp. Most facilities are located on the hillside, whereas the living units are placed on the lower elevations of the camp territory. The sanitary facilities are placed on the edges of the living zones. On top of the hill two sports fields are located, but the majority of the hill is empty in terms of functions, hinting at a lack of use.

In reaction to the quote above, I wrote the following in my diary: The world in and outside the camp is so different. The space has similarities with a holiday park, but than stripped down from all attractive elements. But it also looks like a prison or concentration camp. This emphasizes once again how this space is exemplary of a heterotopia.



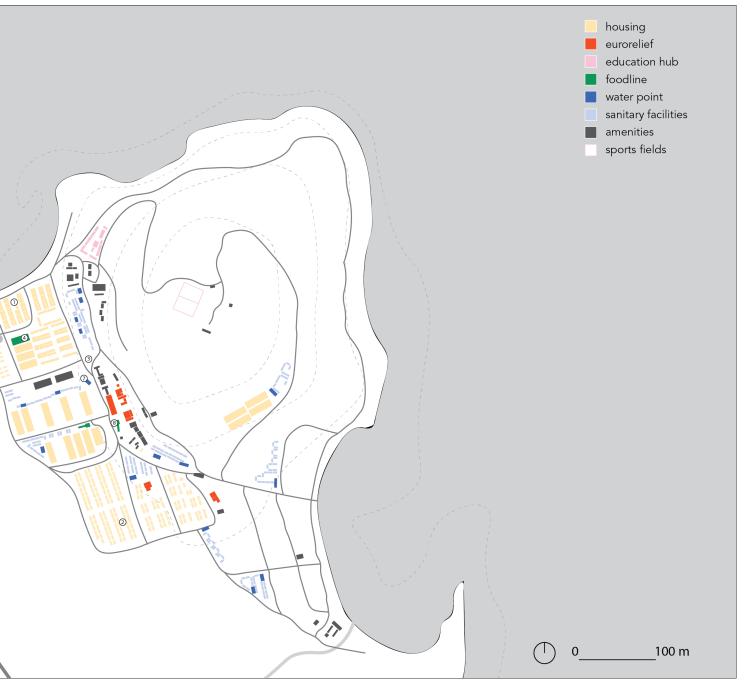


Fig. 47: The housing and facilities in Mavrovouni [own work, 2024]

Lesvos | Mapping

The camp is separated into several zones for diverse household types, in July 2024 only the blue and red zone were inhabited.:

- Blue zone houses families, single women and vulnerable people. All isoboxes are located in the north-east of blue zone. The west half of blue zone consists of RHU's. The few Rubb-halls in this zone were not in use for living during the field trip.
- Red zone houses single men, solely in RHU's.
- Yellow zone only exists of Rubb-halls.
- Green zone is empty for the biggest part, 4 Rubb-halls still exist on the hillside.
- The pink zone is used during busier periods as the first living zone for new arrivals.

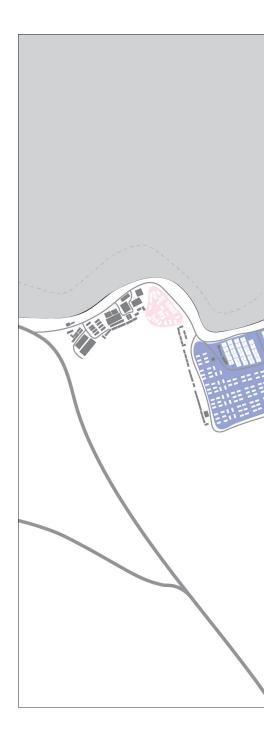




Fig. 48: The residential zones in Mavrovouni [own work, 2024]

Lesvos | Population

The population of camp fluctuates a lot. Figure 49 depicts this as well, there were times of 1000 inhabitants and periods of more than 5000. During the field trip [July 2024] the population dropped from approximately 1300 to 850. Big amounts of inhabitants put more pressure on the available resources, whereas with low numbers the zones can feel empty without neighbours.

The population during this time did not include a lot of unaccompanied minors, although the numbers of the preliminary research, in chapter 0, suggested otherwise. Investigating the needs of this particular group was not possible during the field trip, thus this group is left out of the scope of this project.

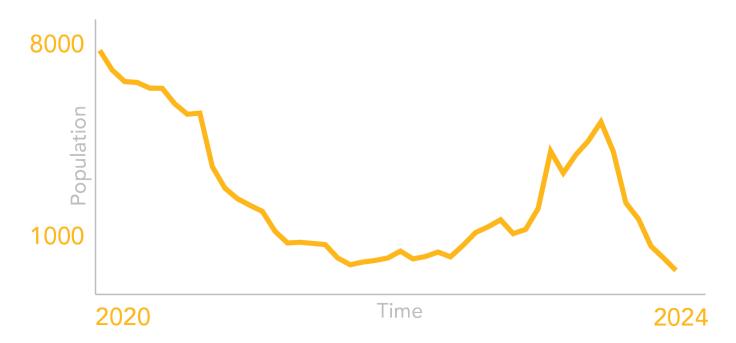


Fig. 49: Camp population throughout the years [Own work; based on data of Eurorelief, 2024]

Lesvos | Daily Life

Figure 50 shows the daily schedules of a child and their parents in Mavrovouni. A general day of a child consists of several classes at school, including Sports, Greek, English, Arts & Crafts and more. The rest of the day is for playing and wandering around in camp, with marbles, bikes or else.

Whereas the children have in theory 6 hours of school to attend, the parents schedule is way more empty. They only have one obligation; foodline at 12:00, the rest of the day can be filled with some household things, but a lot of time is spend boring. Furthermore, there are various organizations outside the camp where people can participate in activities, children are also taken there by their parents.



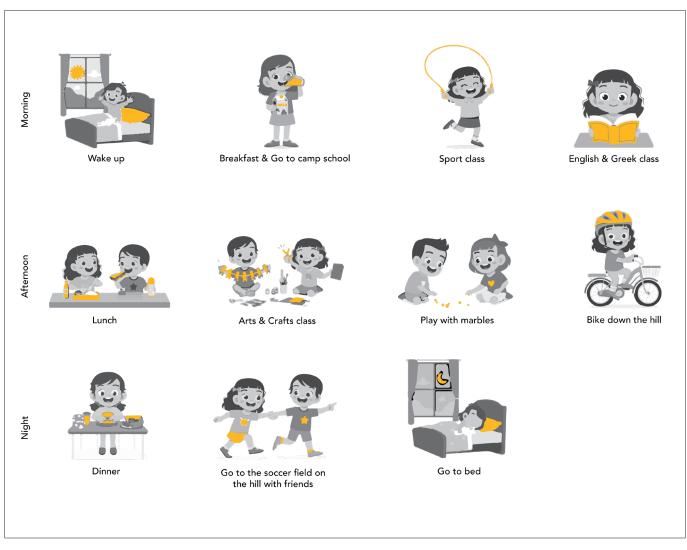


Fig. 50: Daily routine of respectively an adult and a child in CCAC Mavrovouni [Own work, 2024]

The living situation in camp is intense, sometimes for many months to a year. The tents and isoboxes are small, impersonal and the design of the public space is limited.

[Field Trip Diary, 2024]

Lesvos | Living Situation

The observations shown in the following part were done while executing voluntary work for Eurorelief in CCAC Mavrovouni. This drawing does not show a factual living situation in camp, but is based on multiple observations around the isoboxes.

In my diary I wrote down this observation: As volunteers, we sometimes visited children with special needs at home. At one house, the brother of a child created a seating area for us on the pallets outside, with a blanket and cushions. He offered us tea and actually created a typical welcoming Majlis. This could have happened on decking like the one drawn before isobox 205.

As there are already descriptions in the drawing, not a lot of further explanation is needed. Instead, only a few key takeaways are highlighted:

- 1. Residents appropriate the space in front of their homes.
- 2. Some privacy in the living environment is important. Inside the home, are sometimes rooms created with cloths as well.
- 3. The objects surrounding the home are related to primary needs or playing.

These two isoboxes are of All isoboxes are located in families with children and

With a curtain at the front door, privise maintained, but fresh air can come is maintained.

Take your shoes control the house!

f Syrian families. n blue zone, which is dedicated to single women.

vacy le in.

This bike has been owned by 5 other toddlers before.

The door is locked, this family went to Lidl.

On this old bed the neighbours drink chai sometimes.

Fig. 51: Living in and around the isoboxes in blue zone [own work, 2024]

"Within camp, existing is an act of resistance and being yourself is an act of resilience because you're in an environment where you're constantly being reminded, 'this is not yours'."

[Albawab, 2022]

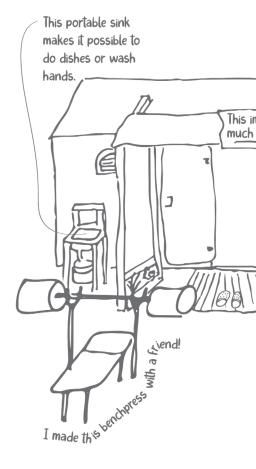
Lesvos | Living Situation

This drawing does not show a factual living situation in camp, but is based on multiple observations around the RHU's. As there are already descriptions in the drawing, not a lot of further explanation is needed.

A few things that stand out:

- 1. Residents are inventive, as illustrated by the canopy and benchpress.
- 2. Shade and cool places are crucial in the Greek summer.
- 3. Some greenery around the home is appreciated, such as the planted sunflower.

In these two refugee hou 16 single men! They did n arriving here.



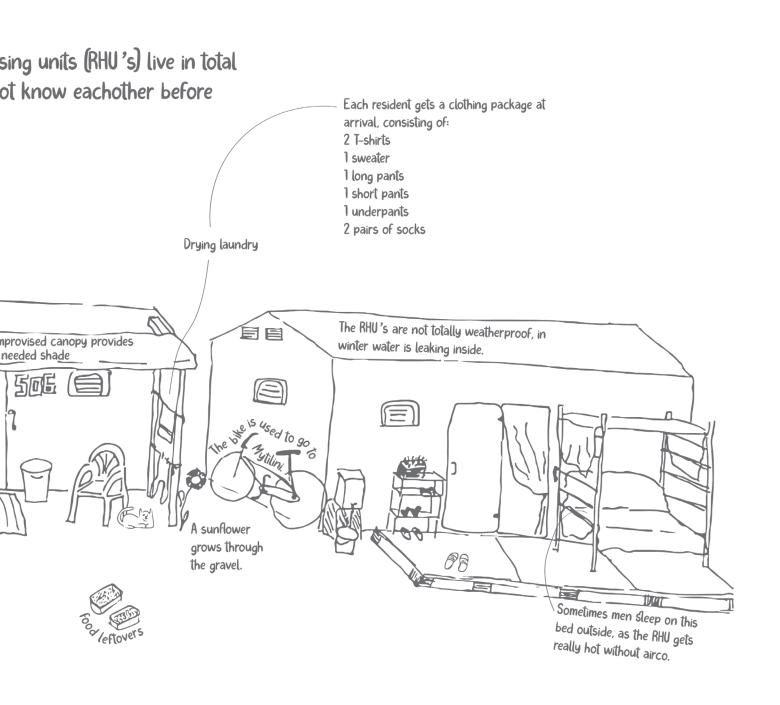


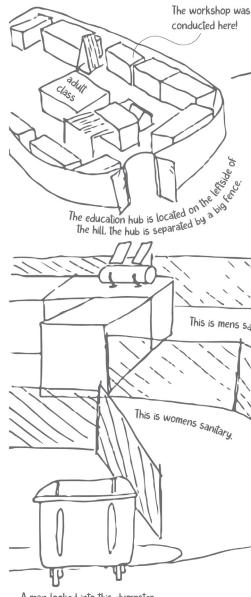
Fig. 52: Living in and around the RHU's in red zone [own work, 2024]

Lesvos | Camp Facilities

As seen in the map, the hillside is full of facilities! This drawing is not to scale, but shows the many things happening at the hill. The path leading to facilities on the hill is quite steep, especially for elderly or disabled people the accessibility is minimal.

Children think the hillside is fun to race down with bikes or scooters, but it is dangerous with cars and the gravel. The sports field is quite far, especially the younger children cannot go there on their own. The Lego hut has limited opening hours, thus is barely used. The sanitary are officially separated for men and women, but is not always acted upon. This can make women feel unsafe.

Women do find a safe space in Womens Community Engagement, which is a place to chat, sew, knit, drink tea, get henna and more. Within this space, a Majlis is created, as is common in Arab cultures.



A man looked into this dumpster, found a toy car and gave it to his son.

The camp is named after this hill; Mavrovouni means black hill.

The hill is sort of the park of the camp, with vegetation and beautiful cliffs. But it is barely used due to a lack of shade.

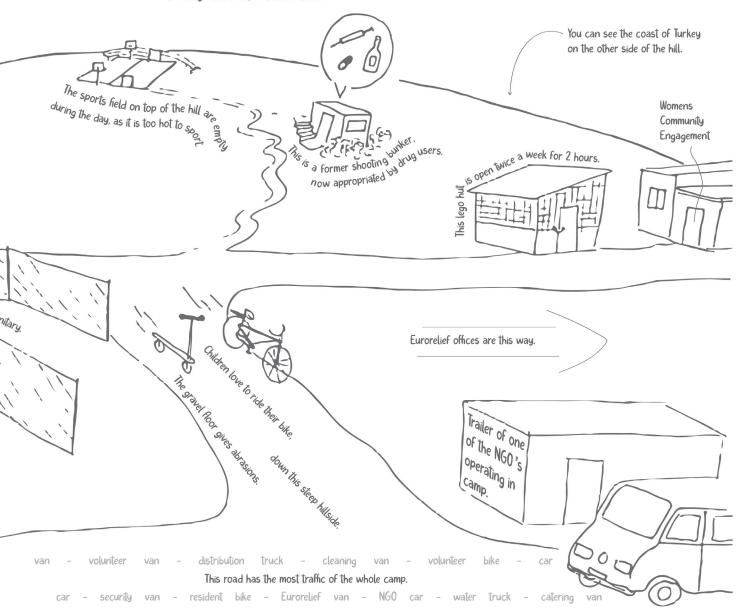


Fig. 53: Facilities on and use of the hillside in Mavrovouni [own work, 2024]

"I don't think this is a safe place to play for those little children" [Kruizinga, 2024] "It is probably as safe as it gets in a refugee camp" [Freeman; Eurorelief volunteer, 2024]

Lesvos | Camp Facilities

The figures show facilities related to the primary needs; food and water. Around noon the central food distribution takes place at multiple locations in camp. There are two foodline structures visualized as they have different spatial characteristics. A quote from my diary about these spaces: The foodlines feel like animals in cages, like cows to be milked. The metal gates open when it is time to get food. People here are just the number on their identity card, real identity lacks.

The blue foodline [top left drawing in Fig. 54] is for families and vulnerable people and located in a Rubb-Hall in blue zone. Children under the age of 13 are not allowed to wait in line unless they are accompanied by their parents. Children above that age are allowed to stand in line and collect food for their families, which happens regularly. The back of the big tent is empty, this becomes a shaded place to play for children.

The yellow foodline is for single men and women, if camp is busy, the canopy is too small for the whole line.

The water point depicts how this is also a space of gathering, where adults chat and children play.

Blue foodline is inside a Rubb-hall. Families get their food here.



This is a foodline for single men and women, they can get food here everyday at 12h.

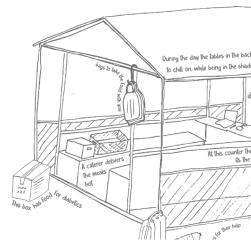
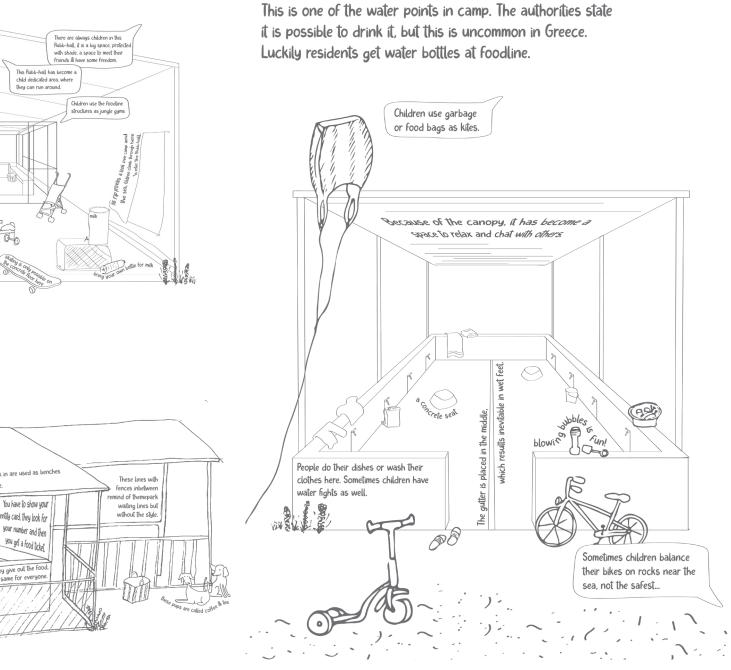


Fig. 54: The use of



foodline structures and a waterpoint in Mavrovouni, quotes in speech balloons are from the education team [own work, 2024]

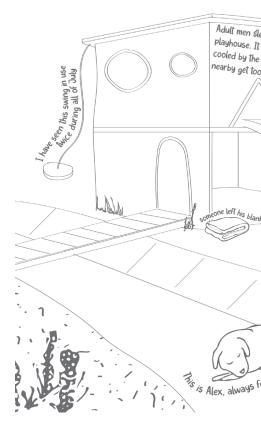
Lesvos | Play Spaces

There are three playgrounds in camp, but they are barely used by children mainly due to accessibility reasons. One of them is located at the end of red zone, children live nowhere near there. The second is located in the education hub, this is used the most, especially around school hours. As the education hub is not located in blue zone, but more remote on the hillside, this place is not very accessible for small children. The last one is depicted in Figure 55. Although this one is located in blue zone, it is occupied by adults, as it is cooler than sleeping in their RHU. Thus, children gather and play in the shade under the trees. The figures highlight the human need for comfortable climatic conditions.

Children do not want to sit on the bare ground, Uno is played on a ground cloth.

The gutter in camp is made of concrete, it is the same colour as all other ground material. But it does define the public space in camp, it gives direction and separation between residential areas and the main road.

This is one of the three playgrounds in a barely used by children.



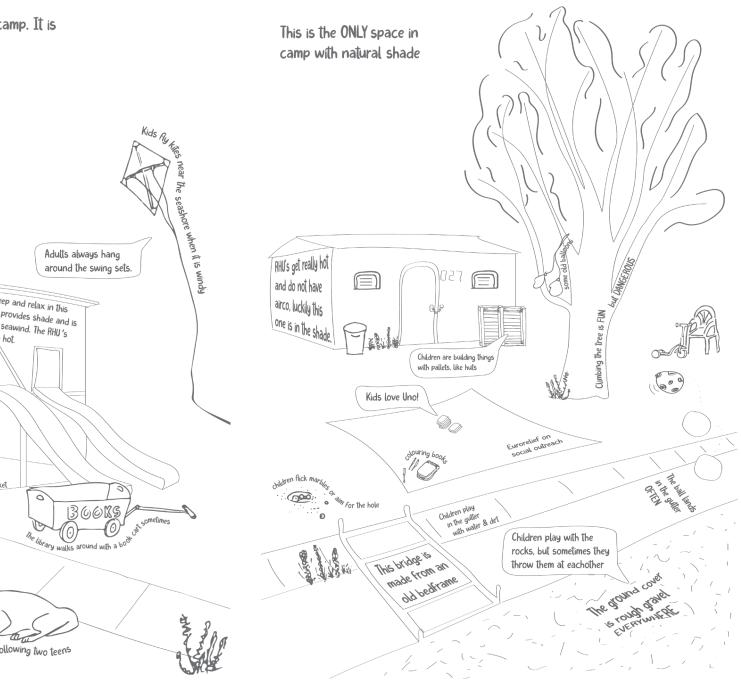


Fig. 55: The use of two play spaces in Mavrovouni, quotes in speech balloons are from the education team [own work, 2024]

Lesvos | Trash Analysis

People leave traces in the spaces they use, most clearly is their litter. During the field trip trash objects were collected in camp to gain more insight in the daily life in Mavrovouni. The pieces of litter are categorized into groups; food, hygiene, clothing, administration and play. This analysis reveals how the camp mainly revolves around the primary needs. Noteworthy is the inclusion of play as one of the categories, highlighting its importance even in difficult circumstances. It shows that play, alongside basic needs, is a vital part of human life. It can be seen as extra proof of the homo ludens theory of Huizinga [1938].



Fig. 56: Analysis of found litter in Mavrovouni [own work, 2024]

Children here still have a long way to go, with more asylum procedures, another new language and once again new friends. While they still have so many experiences to process. They deserve to grow up safely. [Field Trip Diary, 2024]

Lesvos | Workshop Outcomes

As stated in the methodology section, on of the research methods was a workshop with children in the camp. The 'Visioning Play' workshop from the DeCID handbook [Rigon et al, 2021] was used as a base, where displaced children envision their ideal playground. In the appendix a report of this workshop and individual outcomes can be found.

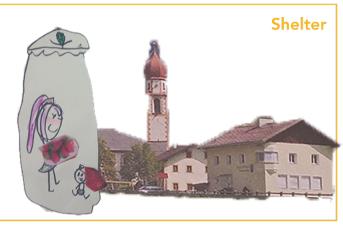
The outcomes were categorized, as shown in Flgure 57. Especially the need for nature was emphasized, and the artworks showed a lot of colour as well. Other conclusions are more difficult to draw, but the outcomes can be used as inspiration for the design.











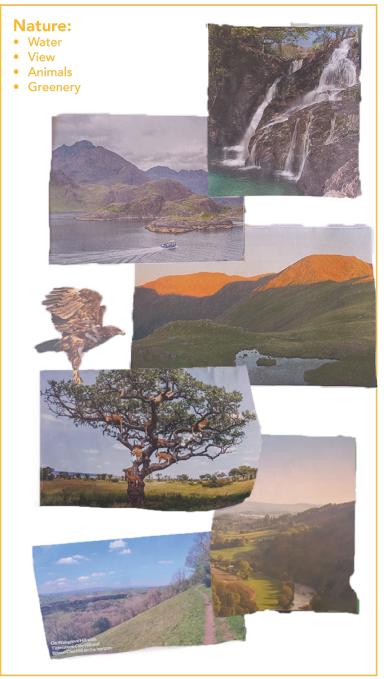


Fig. 57: Analysis of the outcomes of the Visioning Play workshop [own work, 2024]

Lesvos | Education Team

The last two weeks of the field research, the voluntary work was in the education team. This consisted of assisting in two English classes a day and one other lesson, like music, geography, science, arts & crafts and library. The classes consisted of 2-8 children of approximately the same age with one teacher and one teacher assistant.

The classes take place in the education hub, which is a separate space in camp, by fencing and a gate. There are 4 containers for Eurorelief classes, these do not have furniture, children and teachers sit on blankets on the ground. This gives a cosy and safe feeling, but is not very useful for concentration. There is one bigger classroom for adults, including tables and chairs. There are also several trailers from the Greek education, a canopy and a small play hut.

Children do not show up everyday, officially 15 children were listed for each class. The languages and skills differed a lot in every class, making it difficult to teach the group as a whole. The English exercises had to be adapted for every child.

A discussion with the education team provided expert insights into the play needs within the camp. A summary of the conversation is included in the appendix, with select quotes featured in the collage [Fig. 58].

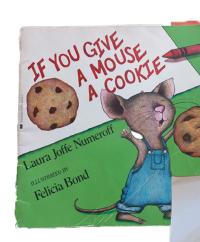






Fig. 58: Collage summarizing the work in the education team of Eurorelief [own work, 2024]

Delft | Living Facilities

For the investigation of refugee shelter Manderspark, the site was visited twice. Each dwelling container housed four people, these could be families, four single men or four single women. There were a few communal kitchens, separated by gender. Residents can cook their own food here, which they can buy with a weekly allowance. The ground cover consisted of concrete slabs everywhere. The indoor activity room burned down recently, a new one was under construction. Boredom is lurking for both children and adults in Manderspark. The canopy gives shelter from rain, it functions as an outdoor meeting space, residents often smoke there. All dwellings are temporal units, Manderspark is a liminal space, lacking permanency.

This is Manderspark, a temporal



refugee shelter, located at the campus of TU Delft.

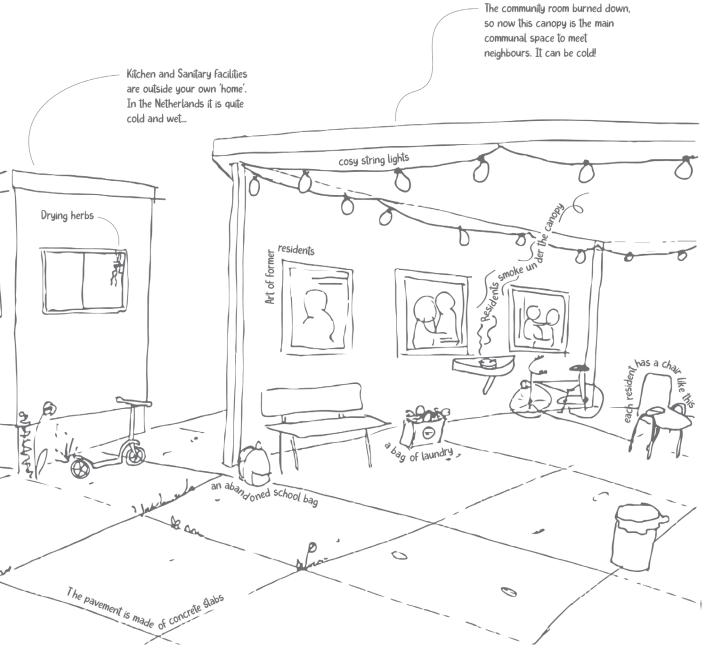


Fig. 59: Use of communal space in Manderspark [own work, 2024]

Similar Facilities Theme Park

The foodline structures remind of the waiting lines in theme parks, as people are separated by fencing. The big difference is the waiting for primary needs instead of amusement. Thereby, the structures have a lot more entourage in theme parks, with decorations and music.



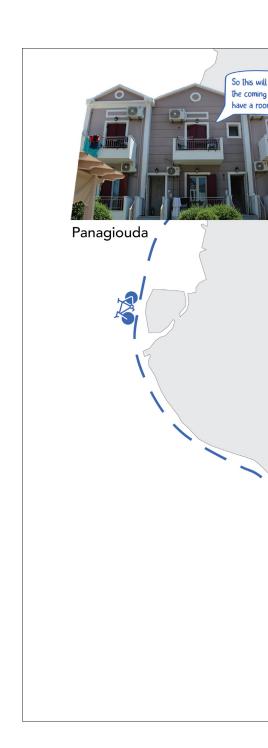
Fig. 60: Waiting line at the Efteling [own photo, 2024]

6 | Conclusion Analysis Journey of Contrast Spatial Conclusion Ethnographic Conclusion Design Questions Attractions in Urban Design

Journey of Contrast

The journey of a refugee that is used for the research was coming from Aleppo, arriving in Mavrovouni on Lesvos, hopefully going to Delft. I made a trip from Delft to Panagiouda on Lesvos, to meet Syrian refugees in camp Mavrovouni. The sea separates each of these locations, marking the divide between different lives.

These journeys are visualized in the map on the right side, including the experience of the contrasting living situations. The field trip emphasized how the opportunities you get in life depend on the place you were born, or to catch it in one term; inequality.



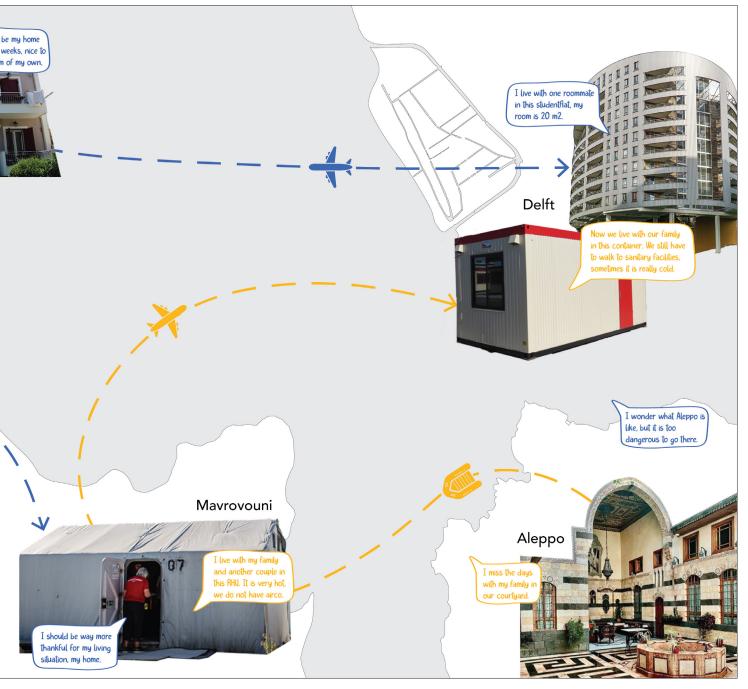


Fig. 61: Contrasting journeys crossing paths in Mavrovouni [own work, 2024]

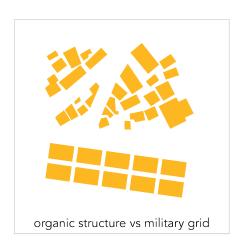
Spatial Conclusion

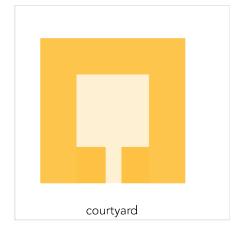
After the spatial analysis, already some conclusions were drawn, resulting in a spatial catalog [see appendix]. The spatial observations during the field trip to Mavrovouni as well as Manderspark validated these.

The following conclusions will answer the subquestion What are the spatial characteristics of the three homes along the route of displacement?

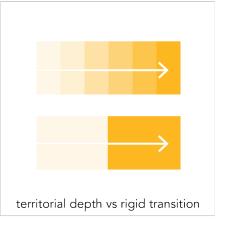
- 1. The grid structure in Mavrovouni and Manderspark is in sharp contrast with the organic urban fabrics as seen in Syria.
- 2. In Mavrovouni and Manderspark the transition from the public camp street into the private home, even bedroom, is rigid. There is no gradual transition, whereas Aleppo shows significant territorial depth, with communal spaces in between the public and private realm.
- 3. The courtyard is an omnipresent spatial configuration in Aleppo, for private homes as well as public markets or mosques. This layout is a kind of combination of the first two conclusions.
- 4. The Majlis is a typical Syrian guestroom, with cushions along the walls as seating. This was seen in Mavrovouni in Womens Community Engagement.
- 5. The need for shelter from weather conditions is visible in Mavrovouni as well as Manderspark, but differs according the climate. People like to gather outside for a chat, but want canopies to protect them from sun or rain
- 6. In Aleppo the public buildings take up a significant portion of the urban fabric indicating the importance of places of meeting. In Mavrovouni the functional foodlines or water points are these places to meet and connect with others. In Manderspark these are the canopy and communal kitchen.
- 7. The citadel in Aleppo is an important site in the city, visible from anywhere and a true highlight. In contrast the hill in Mavrovouni camp is barely used.

Configuration



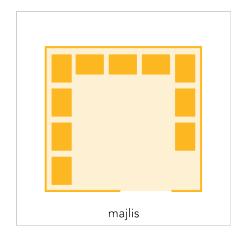


of Space



Gathering Spaces







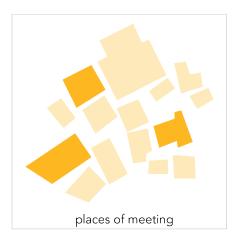


Fig. 62: Conclusion spatial analysis of the three homes [own work, 2024]

Ethnographic Conclusion

This part answers the subquestion How do children and parents live and play in CCAC Mavrovouni?

The following conclusions are drawn:

- 1. The daily schedule indicated the lack of activities for adults in contrast to the scheduled classes for children. Some residents volunteer at the NGO's in camp.
- 2. Children are inventive and play anywhere and with anything they find, but sometimes this is not the safest, especially with the gravel flooring everywhere.
- 3. The previous conclusions already hinted towards the need to focus more on the parents. When they have a daily purpose, they will have more mental capacity for parenting.
- 4. In Mavrovouni residents appropriate the space in front of their home through steps, benches, canopies and more. In Manderspark only some bikes or shoes outside are indicating residence.
- 5. Residents sometimes reuse items of former residents and build things they want like a benchpress.
- 6. Residents protect themselves from environmental conditions by creating canopies.
- 7. People have a need to choose and to own things, resulting in adopting a stray cat as pet.
- 8. Residents seek a community, they will meet others at the functional spaces in camp.

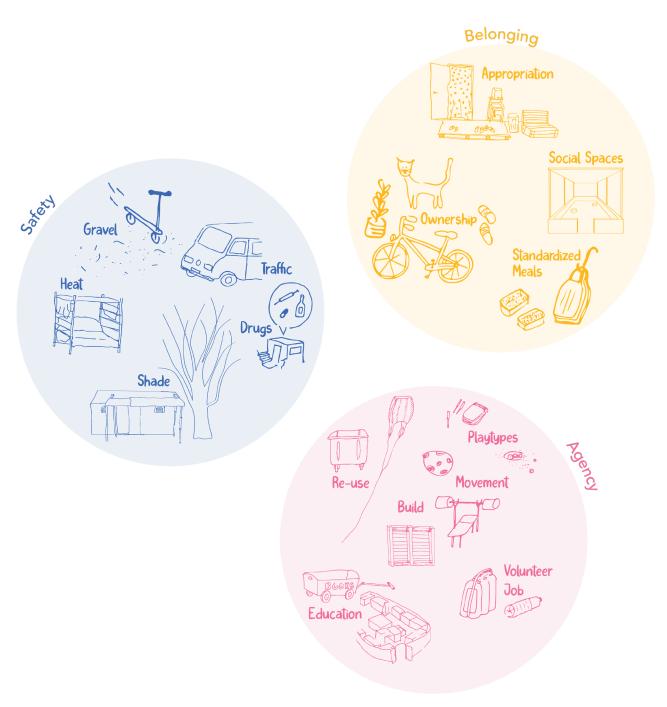


Fig. 63: Conclusion ethnographic research during field trip [own work, 2024]

Design questions

The main research question of this thesis was:

How can play be used to create a vision of heterotopia Mavrovouni that provides a sense of home for displaced children?

With the answers of the first subquestions and the design aim: providing a sense of home for displaced children in Lesvos, the following design questions are drawn up:

- What are the objectives to design CCAC Mavrovouni as a living environment that evokes a sense of home?
- What patterns contribute to a sense of home in CCAC Mavrovouni?
- How can a pattern language be a playful tool for design?
- How can Nostopia Mavrovouni be envisioned by using patterns?

Attractions in Urban Design

Theme parks do not exist without attractions, but the opposite is not true. When looking at the word, attractions are just places that attract people and hold their interest. These can exist in other spaces as well and can range from functional facilities to public art installations. Attractions can take form as architectural landmarks, community gardens or as live performances. Their power lies in captivating visitors through aesthetics, adventure, or engagement, creating destinations that inspire curiosity, foster social interaction, and cultivate a sense of identity. Attractions transform spaces into memorable experiences, making them invaluable in urban design far beyond the gates of the theme park.



Fig. 64: A fairy tale attraction the Efteling [own photo, 2024]



Objective Collages

The observations from the field trip emphasized the three characteristics of home; agency, safety and belonging. These concepts were explored further by the creation of collages as seen in Figure 65. For each collage a short explanation of the chosen pictures is given.

Firstly, what gives a sense of belonging, what makes one feel at home? This could be related to the senses, for example a taste and smell of family-recipes. Also small memorabilia, objects that remind of certain persons or events can make you feel at home. Of course home can have a spatial notion as well, as the picture of the Majlis represents.

The second board shows agency; what makes people feel in control? All voices should be heard in decision-making, ensuring equality for everyone [translation of "iedereen gelijk"]. People should be able to choose how they want to live, hence the different room configurations [top left]. Being able to choose is crucial for having agency, like drawing a play card, or filling in your own square.

The board on the right portrays safety, but safety can encompass many things, physically and psychologically. In the context of a refugee camp, with residents from countries in war, the absence of violence is most important. But environmental safety plays a role as well, in the case of Greece, the heat and lack of shade is a big problem. Additionally, after the often negative experiences with the sea during the flight, people do not feel safe in the sea. Attention to mental health is vital, residents have to cope with this water-trauma.





Fig. 65: Collages depicting the three objectives [own work, 2024]

Objective Tree

The main goal of this project is well-being for residents in Nostopia Mavrovouni. This was broken down in three main objectives based on the definition of home and the observations during the field trip and visualized with the collages as shown on the previous page. As these concepts are quite abstract, they are broken down to more concrete objectives.

For safety this is firstly about personal security and secondly about a healthy environment. For agency this is first and foremost freedom of choice. Secondly this connects to belonging through adaptability, as being able to make choices about the living environment makes you feel more at home. Of course having a community is very important to belonging. In the next level these are made even more concrete, this can be really helpful in the design phase, for example in the creation of patterns [chapter 8].

Figure 66 is the answer to the sub-question What are the objectives to design CCAC Mavrovouni as a living environment that evokes a sense of home?

Personal Security

No verbal aggression

No physical force to harm

Well-Being in Nostopia Mavrovouni Belonging Safety Agency Healthy Freedom **Adaptability** Community of Choice nvironment

Fig. 66: Objective tree [own work, 2024]

Conceptual Model

This model serves as a conceptual representation of Nostopia Mavrovouni. Different characteristics are visualized:

- The grid is the basis, provides a guideline to hold on to.
- The different squares are filled with building materials, each family or community can choose their own preference.
- The green squares show that more nature is incorporated in the camp.
- The central orange is a meeting space, where adults can chat and children can play.
- The roads lead to the orange and form 4 zones, which are shown by the card types.
- The use of trash will be enforced in camp, reusing materials has a lot of potential. The quote "One man's trash is another man's treasure" refers to this.
- The whole camp is in a open box, the boundaries are visible, but not restrictive.
- The strong relation with the sea is shown, as border between their former and future life.
- The figures dream of future houses as well as bringing their culture with them.
- As shading is important in camp, a cloth provides shade for everyone, but still is flexible.
- It is a bottom up approach, with room for community and agency. The objective safety is subtle visible through the zoning and boundaries.









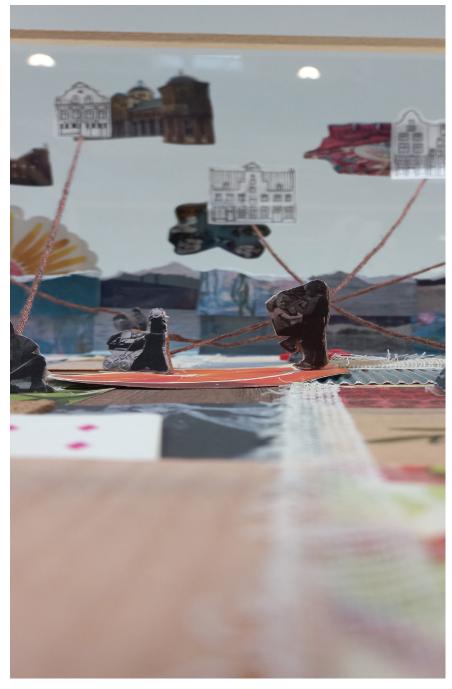


Fig. 67: Conceptual model of the vision for Mavrovouni [own work, 2024]

Scenario Building

The objective tree is used for scenario building. This is visualized in a scenario wheel [Fig. 68]. The three objectives are clashed in pairs, thus creating 3 main scenarios. The secondary and tertiary objectives from the tree are surrounding these scenarios and a time scale is added. To get to the main goal 'Nostopia Mavrovouni' in 5 years.

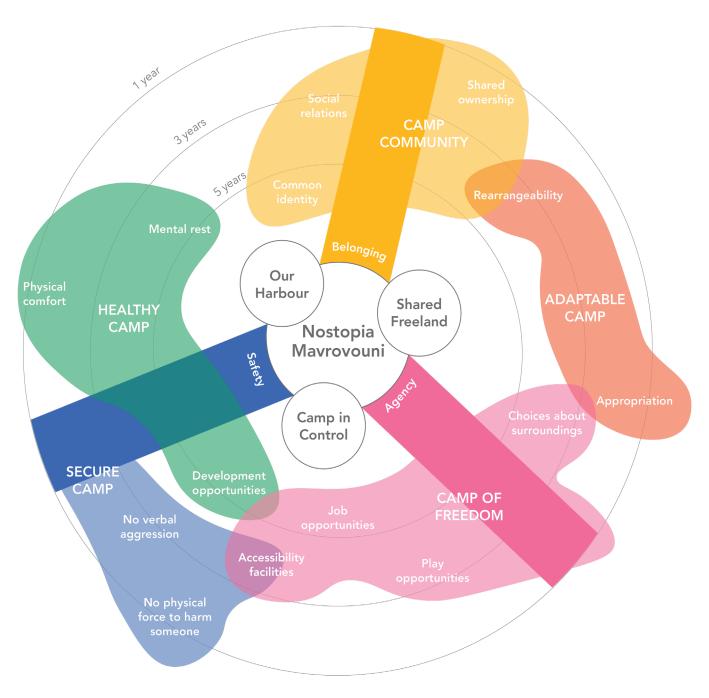


Fig. 68: Scenario wheel based on objective tree [own work, 2024]

Inspiration Landscape Design

When walking through a theme park, all details of the public space contribute to the magical ambiance. The landscape is designed from the rough structure to the smallest details. A few elements can be taken as inspiration for the design of Mavrovouni:

- The entrance is an appealing landmark, welcoming visitors.
- The whole park is a colourful environment and a diversity of materials is used
- Vegetation and water elements enrich the public space throughout the whole park.
- Several elements guide visitors through the park, like the musical mushrooms in the forest of fairy tales.
- The park is divided into different zones, which have funky names.
- The transport network consist of central squares with direct connections.
- Each square has food and sanitary facilities and is centred around a statue or fountain.



Fig. 69: Footpath with a scenic view to some attractions [own photo, 2024]



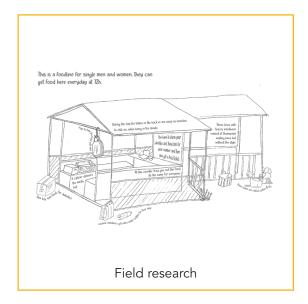
Creation of Patterns

The patterns were created by using the spatial and ethnographic observations during the field trip and backed up with theory. The spatial analysis was the background knowledge for some patterns. Sometimes the positive heterotopia theme park gave inspiration as well.

In Figure 70 this is visualized for one of the patterns. Firstly, the observation was done in Mavrovouni that residents were provided with cooked food daily in foodline, so they could not make decisions about what they wanted to eat. This contrasted with Delft, in which there are some communal kitchens where residents can cook their own food. Secondly, the theory suggested the importance of home cooking for agency and connection. This resulted in the communal cooking pattern.

All patterns are described in the pattern booklet, including the back-up of observation and theory. In the booklet the relations between the patterns are identified and visualized as well. This booklet is written for designers, to be used as a tool in the design process.

The sub-question for the design What patterns contribute to a sense of home in CCAC Mavrovouni? is answered through the booklet.



Home cooking offers control over food choices and can foster connection with others [Simmons & Chapman, 2012].

Theory



R.4 Communal Cooking

By preparing food together, people have agency over their meals while connecting with others.

Fig. 70: Diagram showing how a pattern is designed [own work, 2024]

Patterns & Scenarios

The design patterns from the pattern booklet were integrated into the previously developed scenario wheel. By incorporating these patterns, the envisioned futures become more tangible and actionable, bridging the gap between abstract ideas and real-world implementation. This updated scenario wheel serves as a foundation for mapping out the three main scenarios in the next phase, it provides a structured framework for envisioning potential design outcomes.

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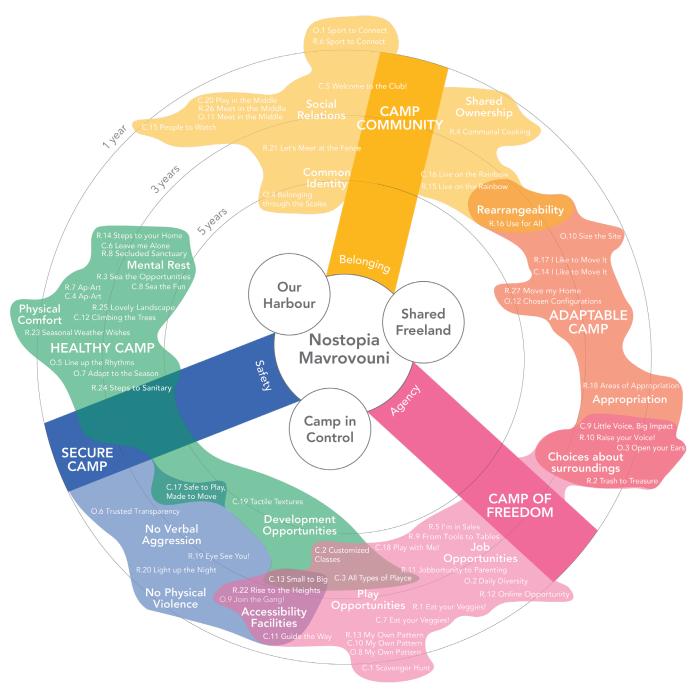


Fig. 71: Scenario wheel with integrated patterns [own work, 2024]

Shared Freeland

The first scenario, Shared Freeland, brings together the objectives of agency and belonging. The patterns from its two sub-scenarios, 'camp community' and 'adaptable camp', are integrated into the spatial context wherever feasible. These patterns relate to shared ownership, rearrangeability and appropriation. The accompanying collage illustrates smaller-scale interventions based on the patterns.



Fig. 72: Collage Shared Freeland [own work, 2024]





Fig. 73: Scenario map Shared Freeland [own work, 2024]

Our Harbour

Safety and belonging come together in the scenario Our Harbour. It draws on the patterns from the sub-scenarios 'Healthy Camp' and 'Camp Community'. This scenario focuses on both individual and collective well-being. The used patterns address essential aspects such as mental rest, physical comfort, fostering a common identity, and strengthening social relationships.

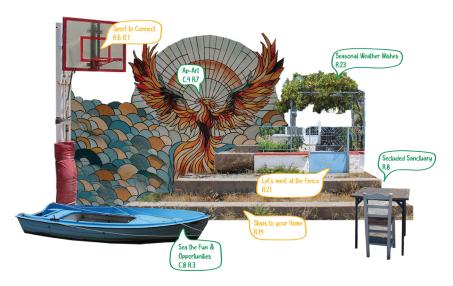


Fig. 74: Collage Our Harbour [own work, 2024]





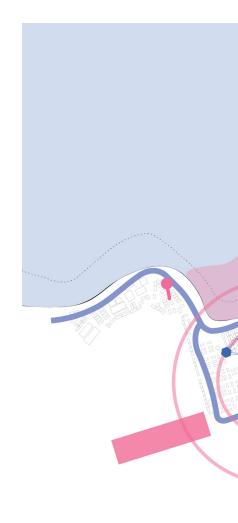
Fig. 75: Scenario map Our Harbour [own work, 2024]

Camp in Control

Camp in Control focuses on agency and safety of the residents. It incorporates patterns from the sub-scenarios 'Secure camp' and 'Camp of Freedom', focusing on empowering individuals to make their own choices, such as participating in play or work activities. The scenario envisions a camp where facilities are accessible to all, fostering inclusivity, and where a zero-tolerance approach to physical or verbal violence ensures a safe and respectful environment for everyone.



Fig. 76: Collage Camp in Control [own work, 2024]



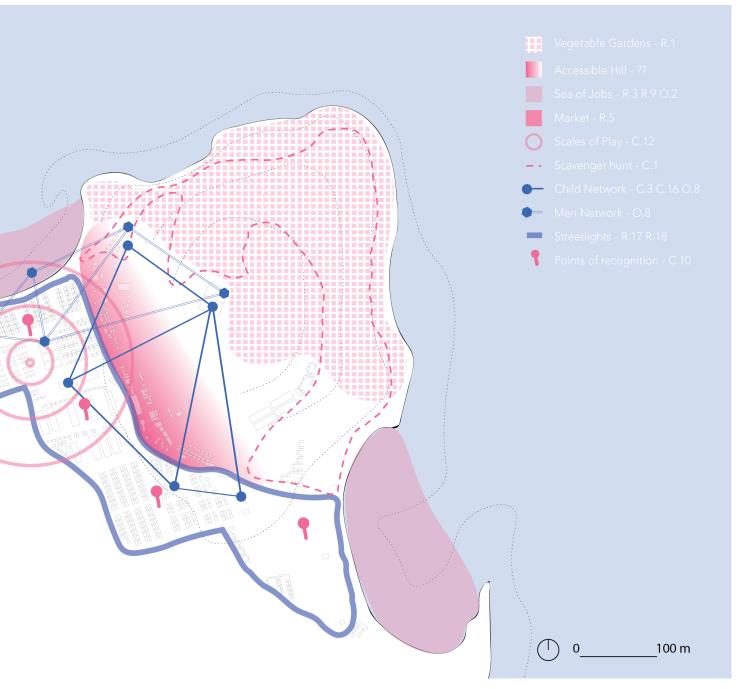


Fig. 77: Scenario map Camp in Control [own work, 2024]

Validation of Patterns

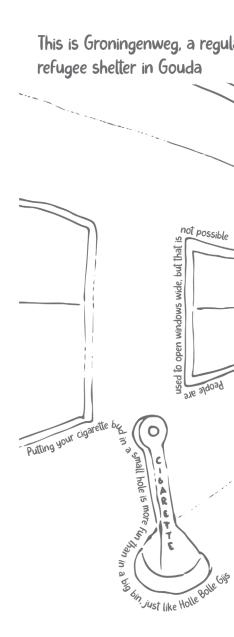
During the finalization phase of the pattern language, a field trip to a refugee housing location in Gouda, the Netherlands was conducted. This visit validated some of the created patterns through ethnographic observations as well as opinions of experts. Some patterns were validated by their presence on this location and following appreciation by residents and the organisation. Some problems in Gouda were similar to those in Mavrovouni, resulting in double validation of some patterns.

The following patterns were present:

- Eat your veggies: a veggie garden was created for the residents.
- Eyes on the street: the courtyard morphology increases social safety, as neighbours see one another walking in and out.
- Lovely landscape: the planters hanging from the handrail make the location feel homely.
- Sport to connect: a sport container gives residents the opportunity to exercise and socialize.
- From tools to tables: A bike repair container gives residents opportunity to improve their reparation skills.
- Welcome to the club: the communal room offers opportunity to meet with others and organise events.
- Communal kitchen: the communal room has some cooking facilities, groups can cook and eat together if they want to.
- Open your ears: women voiced their needs to the location manager, they wanted window film and a camera in the communal space.

The following patterns were missing:

- Seasonal weather wishes: currently the courtyard lacks a canopy for shelter from rain. This offers a space to chat with others and have a smoke, during wetter seasons.
- Meet in the middle: the communal space is not located in the courtyard, but in a separate building. This impairs its use and people stopping by quickly.
- Areas of Appropriation: Personal adaptation and appropriation is barely allowed. Residents aspire more influence on their environment.



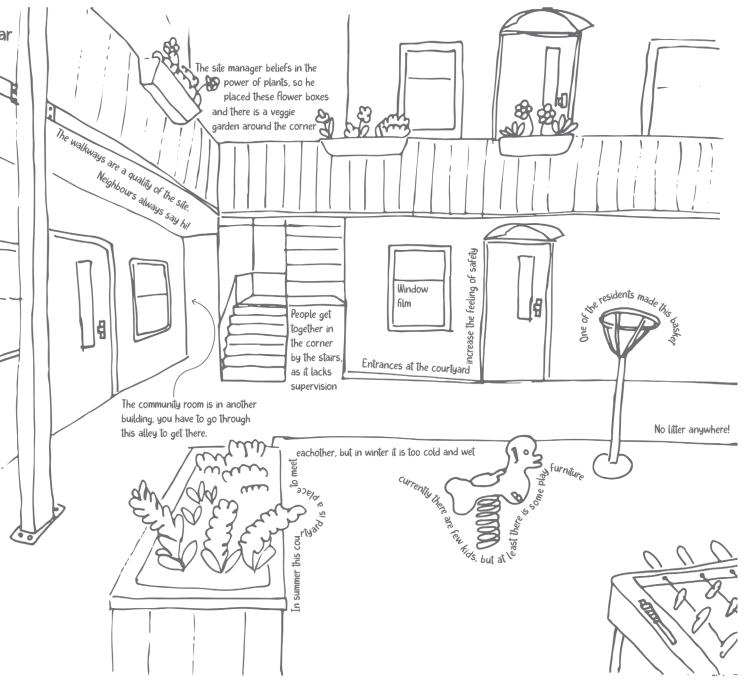


Fig. 78: Use of space in refugee housing location in Gouda [own work, 2024]

Playing with Patterns

As explained, a pattern language is a structured set of design solutions addressing spatial challenges. As stated before the pattern language provides a common vocabulary for both professionals and non-professionals. This makes it useful in the design process to let all stakeholders engage. The patterns are structured according three main stakeholders, their patterns can be combined and may enforce each other.

But instead of a traditional dialogue with this as language, a game will be developed. As a game is a more inclusive and engaging tool in the design process. It levels the playing field by breaking down hierarchies between stakeholders and stimulates active engagement with the patterns. It can reveal innovative solutions that might not emerge in conventional discussions, providing input for the camp designer [Fig. 79]. Through playing with the pattern cards to shape the living environment, the title 'a playce like home' takes on a deeper meaning.

The goals of the game for each of the stakeholders are stated in Figure 79. The preliminary requirements for the game are:

- The game should be easy to understand for all stakeholders, including different ages, languages and skill levels
- The players should be able to make combinations of the pattern cards
- Players should be able to assess the patterns
- The game can be played anywhere, there are few spatial requirements
- The game is designed with minimal objects

The first idea of the game is shown in Figure 80, depicting 3 rounds. Firstly, the patterns are explored within the group, so all stakeholders play separately. Secondly, they will play together and thus interact through their patterns. Lastly, the designer joins the game table, to get clarification if necessary. In this round, stakeholders can assess the used patterns as well.

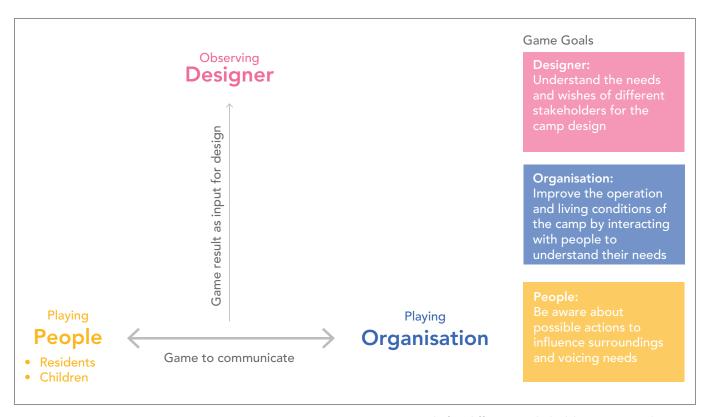


Fig. 79: Game goals for different stakeholders [own work, 2024]

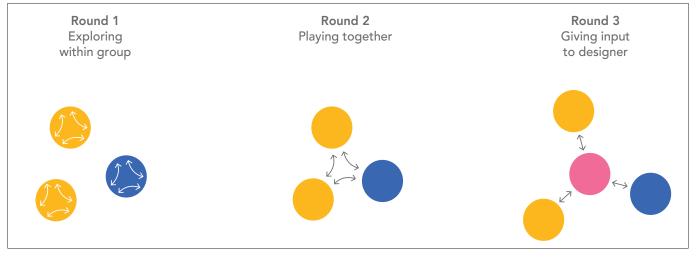


Fig. 80: Game idea including three play rounds [own work, 2024]

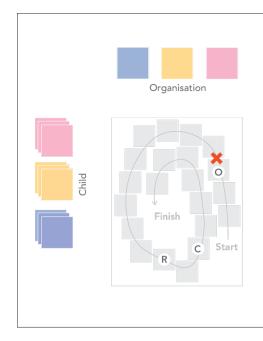
Playing with Patterns

After a meeting with a firm that designs games with impact [Raccoon serious games], some more aspects to consider in game design came up. First and foremost, it is important to distinguish a dialogue facilitator from a game. The distinction was clarified by introducing the main components of a game:

- 1. Voluntary participation
- 2. Goal: giving a reason to play the game
- 3. Rules: give structure to the play
- 4. Feedback
- 5. Obstacles: challenging the players

Secondly, the learning objective for the game has to be set clearly to ensure its effectiveness. When a game attempts to serve multiple goals simultaneously, it risks becoming like a Swiss army knife: versatile but often ineffective at performing any one task exceptionally well. Several options for the game [Fig. 81] and its learning objective were explored during the meeting:

- A game to raise awareness and show the need to give residents agency. A first idea is to give the organisation-player less options to act or their actions would be annulled, whereas the resident-player get a lot of power.
- A game for the children, that they can actively participate in the design process. Some first options include a simple environment, that children can customise with stickers of furniture, toys and other belongings to shape the space.
- A game for all stakeholders to give input for the designer. The patterns
 are combined to form multiple narratives, but it has a spatial output
 as well.





Resident

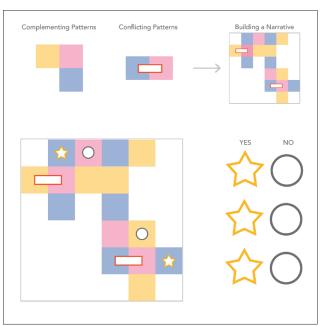


Fig. 81: Three options for a game for Mavrovouni [own work, 2024]

Playing with Patterns

The last game option has been further elaborated on, Figure 82 shows what the different game rounds could involve.

In this game all stakeholders should be playing, but as the game is quite difficult for children, they would have representatives. It could be beneficial to introduce a round 0, in which the representatives gain the opinions of children. In this way, children's voices are indirectly present at the game table.

In the first round stakeholders need to explore within their group which patterns they think are important and which are not. They can form three piles; must have patterns, nice to have patterns and not needed patterns. The latter can be discarded.

Each stakeholder can bring their first two piles of patterns to the main game table. In this round all stakeholders play together and come up with combinations of patterns. By putting the tiles on the game board they built narratives that can take multiple directions. Complementing patterns can just be put together, conflicting patterns should be marked with a red block.

In the last round the designer takes place at the game table. The stakeholders are going to reflect on the narratives they built. Each of them gets a star to highlight a crucial pattern and a circle to highlight a pattern that they do not want to be implemented.

Figure 82 is a concept answer to the sub-question *How can a pattern* language be a playful tool for design? A prototype of this concept game was created to be tested.

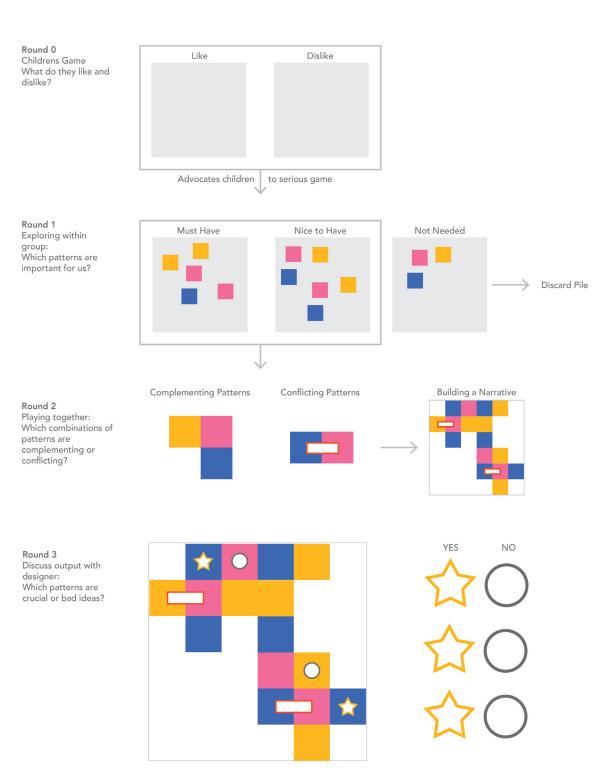


Fig. 82: Concept of a game for design [own work, 2024]

Playing with Patterns

The game was tested with three volunteers who worked in Mavrovouni in July 2024 as well. They each represented a stakeholders during the game. The pilot resulted in several recommendations, on the game itself as well as on the patterns. In the appendix a report of this pilot can be found.

Firstly, some remarks on how the game works. The current version is more a facilitator of the conversation than a game. It did give concrete input for the design through new combinations and interpretations of patterns. Currently, there is no clear end of the game, this should be devised. One volunteer preferred the image side of the cards, the others the text side. Both could be updated to be more clear and coherent with each other. Both should stimulate imagination!

Secondly, some recommendations on playing this in the camp. The current set of patterns is probably too extensive. Separating the set into smaller portions, to play multiple games through time, could be a solution. The patterns are already assessed on their time-frame, so this should be quite easy to do. The game cannot be played with all residents at the same time, so a way to select participants need to be thought of. The patterns are quite ambitious, it might be necessary to make them more realistic to the current situation.

Thirdly, some remarks on the content of the patterns and input for the design. A newly suggested pattern was stability of staff in camp, turn-over of volunteer should be minimized. Many patterns could suggest an app that includes notifications and a navigation function for guiding residents through the camp. An example of newly generated combinations of patterns was the trio Live on the Rainbow, Small to Big and Guide the Way. Through this combination, parents can tell their children to play up to the pink houses but no further.

Lastly, this pilot game validated the objectives, safety, agency, and belonging. Although they were not mentioned in the beginning, all three of them came up during the conversation.



Fig. 83: Output of pilot game [own work, 2024]

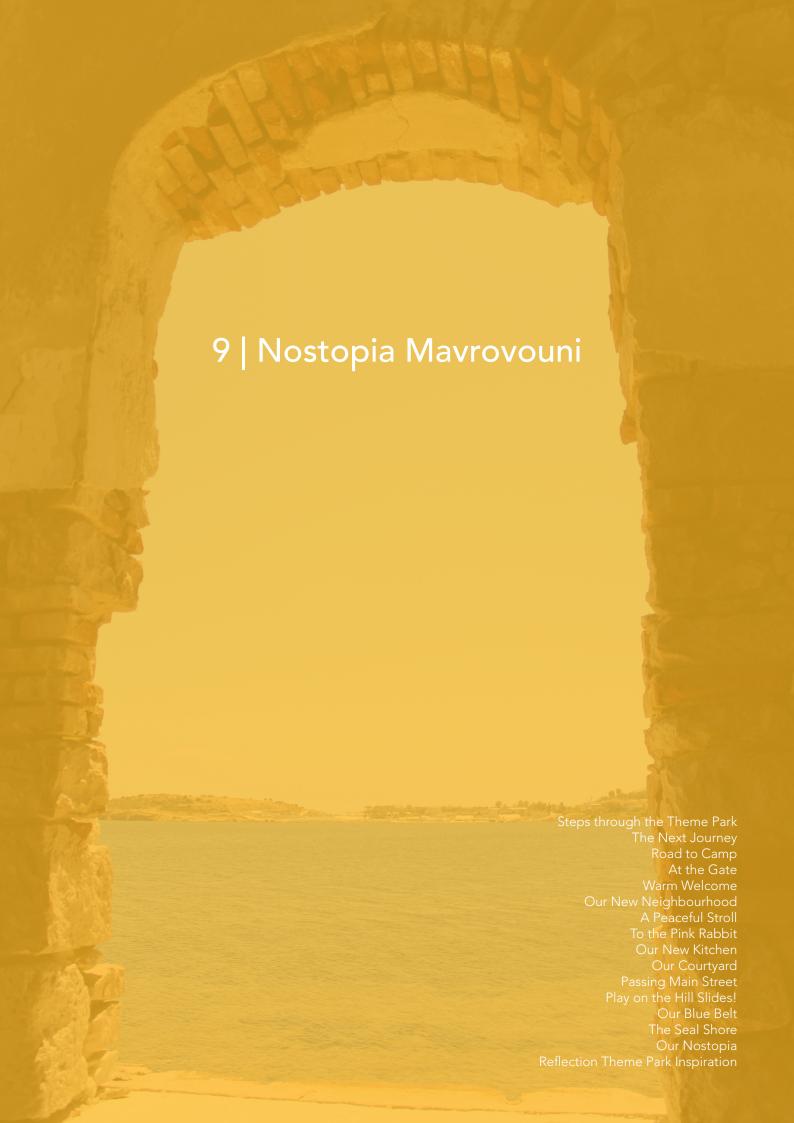
Holle Bolle Gijs

During the field trip to the refugee housing location in Gouda, the location manager mentioned that the cigarette poles with small holes were used way better than big bins. Someone compared this with Holle Bolle Gijs [meaning something like hollow-bellied Gijs] in the Efteling. This is a trash can in the form of a fat person, who is always hungry. He says 'Paper here' and 'Thank you' when you put your trash in his mouth. It makes cleaning up your trash way more fun! The take-away from this is that basic chores can be made pleasant through small adjustments.

Another note on this trash can, he wears another outfit in winter! Also the small elements can adapt to the season, referring to the pattern Seasonal Weather Wishes.



Fig. 84: Trash can Holle Bolle Gijs during Winter Efteling [Efteling, 2022]



Steps through the Theme Park

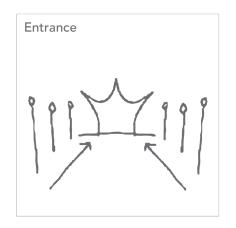
The design of Nostopia Mavrovouni draws inspiration from the experience of walking through a theme park. The key landscape design elements of the Efteling were analysed, informing the design of Mavrovouni. A simplified representation of these characteristics is shown in Figure 85.

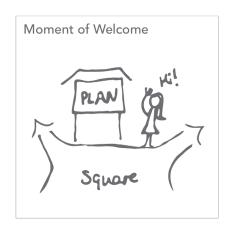
Firstly, the entrance of the Efteling is marked by an imposing architectural structure that immediately captures attention. The flagpoles along the road naturally guiding visitors' focus toward the entrance. Upon entering the park, visitors can have a moment of rest on a central square. They are welcomed by fairy tale figures from the theme park. This space serves as an orientation point, where groups can gather and plan their journey.

The park is divided into zones tailored to different target groups. These include areas specifically designed for young children and thrilling attractions like rollercoasters for teenagers seeking more adventurous experiences. A small train encircles the entire park, functioning as a convenient "ring road" that allows visitors to easily access distant areas.

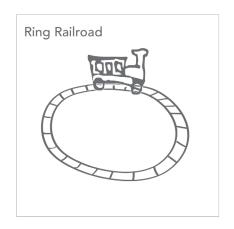
The central zone of the park is the most active and bustling area. In contrast, the quieter, more serene functions are situated along the park's edges. This coheres with the two main types of paths in the park. Wide pathways with asfalt or brick flooring establish strong visual connections between main squares. Scenic trails with greenery and shell flooring offer visitors glimpses of nearby attractions. Throughout the park, a diverse range of elements subtly guides visitors along their journey, from way-finding features to thematic decorations.

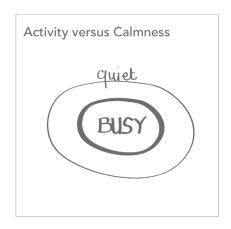
The park is structured as a network of squares, with a main square as its core. The central hub extends outward into smaller squares and paths, like a branching tree. The squares themselves are paved with large tiles. Each square is equipped with basic amenities, like trash cans, food stalls and sanitary facilities.

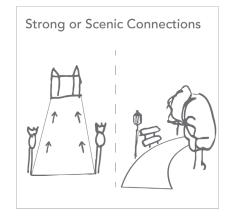


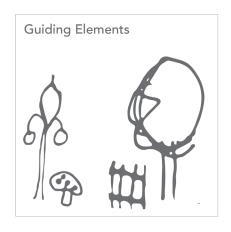












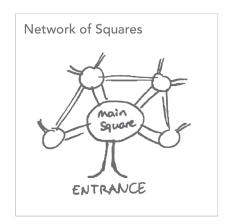




Fig. 85: Sketches of theme park design [own work, 2025]

The Next Journey

This chapter presents a revised depiction of the arrival at Camp Mavrovouni. The sea crossing in a dinghy at night remains unchanged, the island on the horizon evokes hope for the future. The backpack in the rubber boat is the only belonging that is taken on the journey.

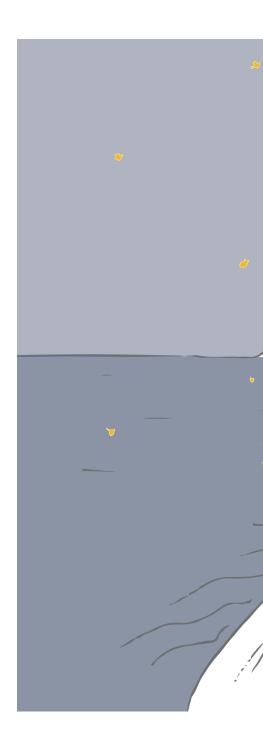




Fig. 86: View of the sea crossing [own work, 2025]

Road to Camp

The road to camp has small adjustments that make it more welcoming. The string lights guide towards the new home. The footpath includes play possibilities and near the entrance some activity is happening. The hill behind looks interesting, with some interesting places. People have left their traces, someone put their bike on the side and had a moment of rest by drinking some water.

Some present patterns are:

- Guide the way: the poles with hearts that carry the string lights guide towards the entrance of camp.
- Light up the night: the string lights make the road to camp well-lit, giving a sense of safety.
- Small to big: a small hopscotch path in front and bigger play spaces on the hill.
- Daily diversity: the hill shows a diversity of activities available.





Fig. 87: Walkway towards the camp [own work, 2025]

At the Gate

Arriving at the gate of Mavrovouni, this drawing shows how the gate has become a social space. It has a welcoming ambiance through colourful elements, greenery and opportunities for staying and meeting others. The human traces depict how this is a space of meeting other residents and locals, while having a snack. The scooter belongs to a boy living in Panagiouda, he loves the ice cream here.

Different patterns are represented:

- Let's Meet at the Fence: the picnic table is a place to sit and chat
- I'm in Sales: the current owner of the ice cream shop learned how to make ice cream of his former neighbour.
- Ap-Art: an artist painted the gate.
- Tactile Textures: the footpath leading through the gate.
- Sport to Connect: the monthly football tournament is announced, it was set up by two teens that have lived here.
- Lovely Landscape: planted greenery in and behind the fence.



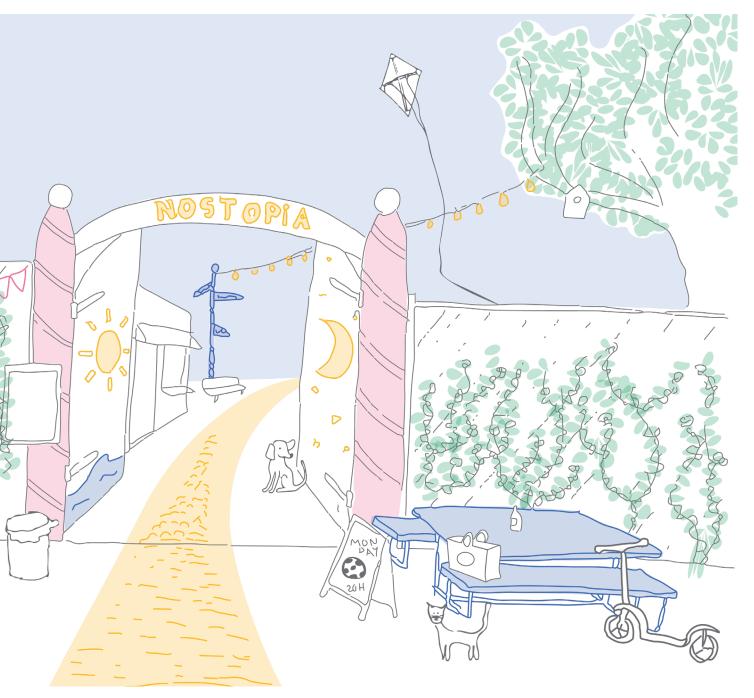


Fig. 88: Gate to Nostopia Mavrovouni [own work, 2024]

Warm Welcome

Having passed the gate, a trailer with welcome on the side depicts where to register. The small square feels intimate and some tea can be offered to new arrivals. The dog aside the trailer is welcoming every new arrival. Every new resident receives a map of the camp to know where main facilities and their own home can be found. Behind the square a footpath separates from the main road, the car road follows the coastline, the footpath does not. Encountering the sea again after an intense crossing can be avoided.

Some of the present patterns are:

- Guide the Way: the signpost shows where to go for different facilities or residential zones.
- Tactile Textures: the square, footpath and main road are materialized differently.
- Open your Ears: this trailer has a small place to sit and chat with (new) residents as volunteer.
- Trusted Transparency: the news board notifies residents of changes in camp in time.
- Seasonal Weather Wishes: The sunshade of the trailer can be raised in colder seasons.





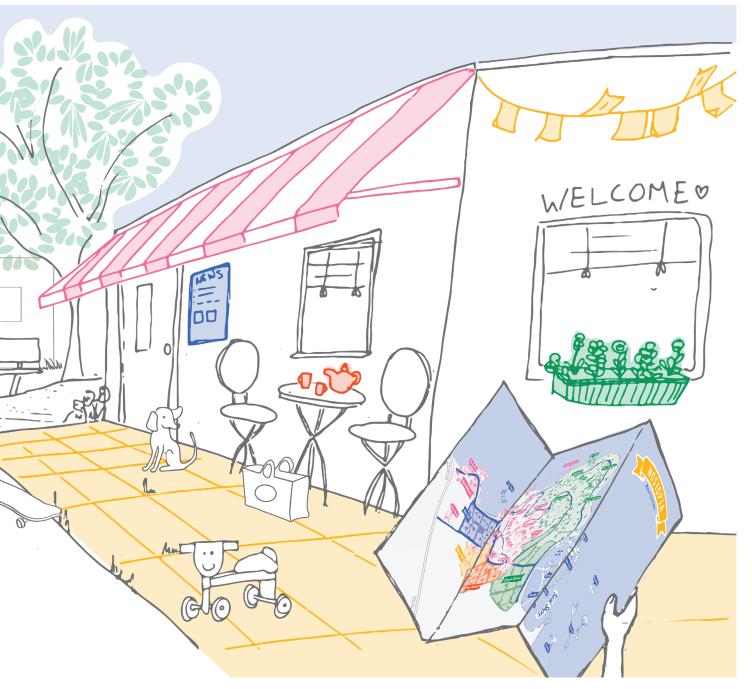


Fig. 89: Square behind gate with trailer to get registered [own work, 2025]

Our New Neighbourhood

Just like in a theme park, upon arrival one gets a map of the camp. This map is inspired by maps of theme parks. Although the attractions are not roller-coasters, they sure are 'spaces that attract people'. Many attractions showcase playfulness, for adults or children.

The current living zones are restructured and their names have a more positive connotation. Each zone is divided into smaller communities [Belonging through the Scales], which share per three communities a central meeting square with communal kitchen. For a few courtyards possible configurations of the homes are shown.

The other tree zone have a strong character as well. Firstly, the pink Playce of Services, with useful and playful activities, this area is mainly located near the entrance and on the hillside. Secondly, Peas and Quiet, shown in green on the backside of the hill. In this area people can find activities and rest possibilities surrounded by nature. Lastly, the Seal Shore encompasses the many activities that can happen by using the sea.



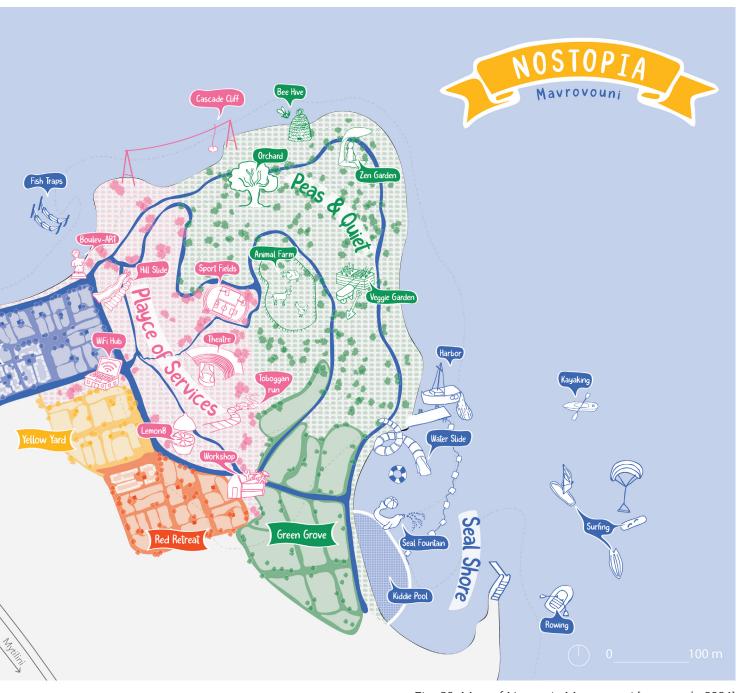


Fig. 90: Map of Nostopia Mavrovouni [own work, 2024]

A Peaceful Stroll

The newly arrived family is walking towards their own new home in the blue belt. They take the footpath, which leads through a natural area. The kids immediately want to play at the play equipment aside the path. The parents can sit on the bench to keep an eye on safe playing. Some children have left their toys behind, like the football, walking bike and colouring book.

The patterns highlighted in this eye-level drawing are:

- Lovely landscape: the road is thoughtfully designed with landscaping elements like trees, lighting, urban furniture and play equipment.
- Areas of Appropriation: some birthday party left their decorations and blanket to sit on.
- Play with me: the bench aside the playground stimulates parents to accompany their children in playing.
- Climbing the Trees: interaction with greenery is stimulated by the trees and plants in and around the playground.



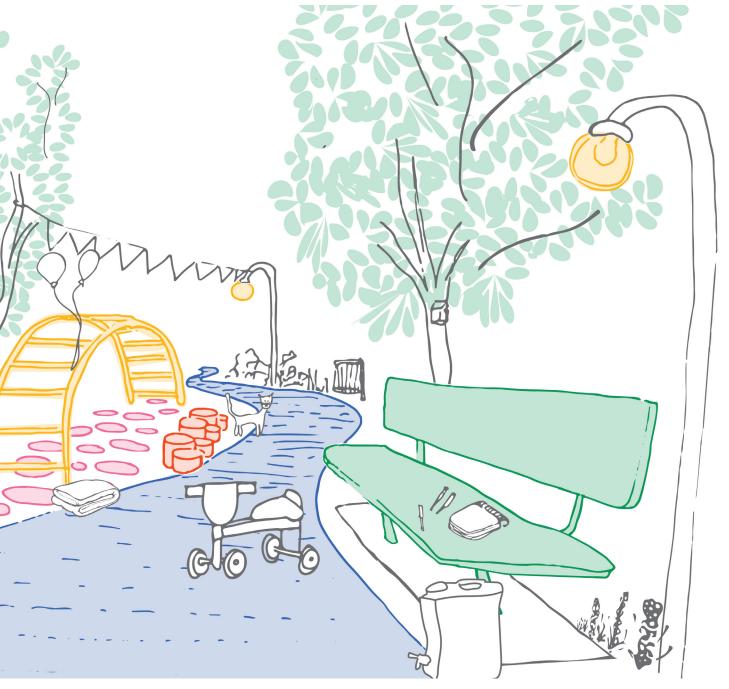


Fig. 91: Natural route with play opportunities towards the blue belt [own work, 2025]

To the Pink Rabbit

The family entered the blue belt and now has to cross the car road. They see the pink rabbit in the air, they were told to go there! Directly under it is a bright red structure. They pass the first houses, which have are colourful through personal additions like curtains and paint. For residents this side feels like the backside of their home, which is why they hang laundry and store unwanted items here. Some greenery detaches the residential ground from the footpath. A volunteer uses the book cart to bring animated books to children throughout the blue belt.

The patterns that are visible here are as follows:

- Live on the rainbow: the houses are decorated and the bright red structure adds to the colourful environment.
- Steps to your Home: the small green strip makes the transition from public to private spaces feel less rigid.
- Guide the Way: the pink rabbit makes it easy for children as well as adults to orient themselves.
- My Own Pattern: Residents can post their initiatives on the community bulletin board, encouraging participation and collaboration.

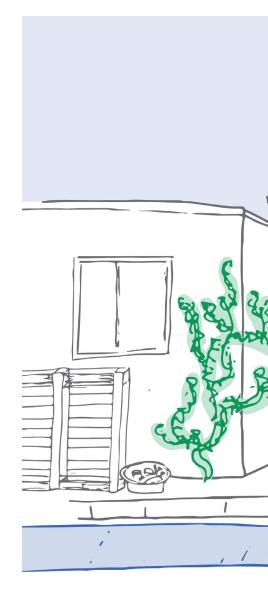




Fig. 92: Path towards the pink rabbit cluster [own work, 2025]

Our New Kitchen

This communal space encompasses an open kitchen and pavilion structure. The bright red frame functions as a landmark, and can be used in different ways by diverse communities. This is a crucial meeting space within the living zones.

Some of the patterns that are present:

- Welcome to the Club: this space is a gathering space for communities.
 The Majlis is typical for Syria and neighbouring cultures, it was created by a former resident. The new Syrian family immediately feels at home with this recognisable layout.
- Use for All: the kitchen can be used by anyone for many activities. One of the residents of the pink rabbit cluster gives guitar lessons here regularly.
- Communal Cooking: the outdoor kitchen can be used by everyone. The kitchen utensils, bottles and food scraps depict its use by many.
- Areas of Appropriation: the structure is appropriated with art, the herbs of a cook, the birthday party of a child and the weekly schedule.
- Online Opportunity: the laptop shows a wifi sign, this is one of the spaces with internet connection.
- People to Watch: the different seats make it comfortable to observe others in this place of gathering. The



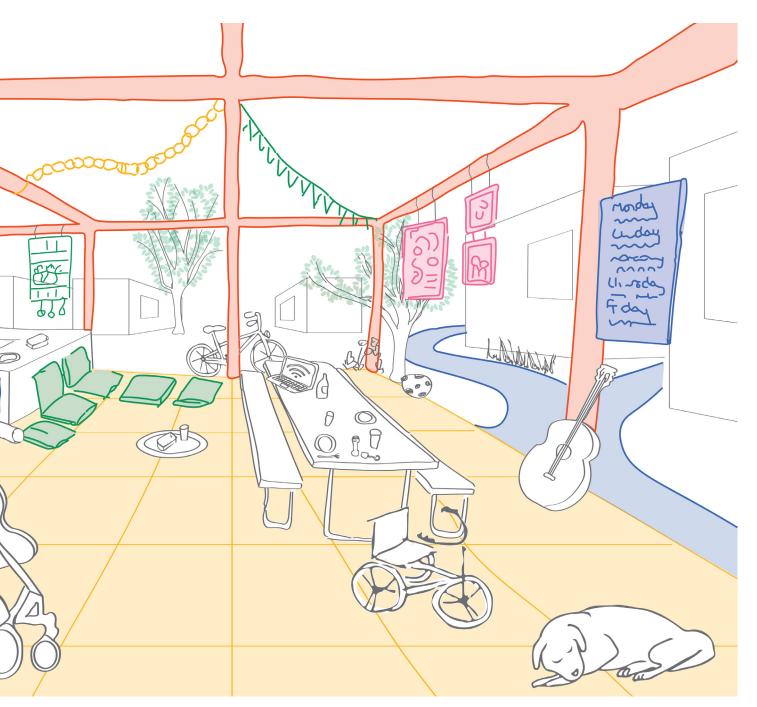


Fig. 93: Communal kitchen in the pink rabbit cluster [own work, 2024]

Our Courtyard

When walking through the communal kitchen, the family sees their courtyard. In the centre a small square with a tree can be found, it looks like an intimate space.

The patterns visible in this drawing are:

- Meet in the Middle: in the centre of the courtyard a square is designed for meeting neighbours. Children meet up at the communal kitchen to play, like racing with their scooters throughout the courtyards.
- Belonging through the Scales: the walk through camp takes one through the scales; from the blue belt, to the rabbit area, now into the courtyard.
- Ap-Art: the paintings hanging from the structure are made by three neighbours of one of the courtyards.
- Daily Diversity: the weekly schedule shows a diversity of activities.



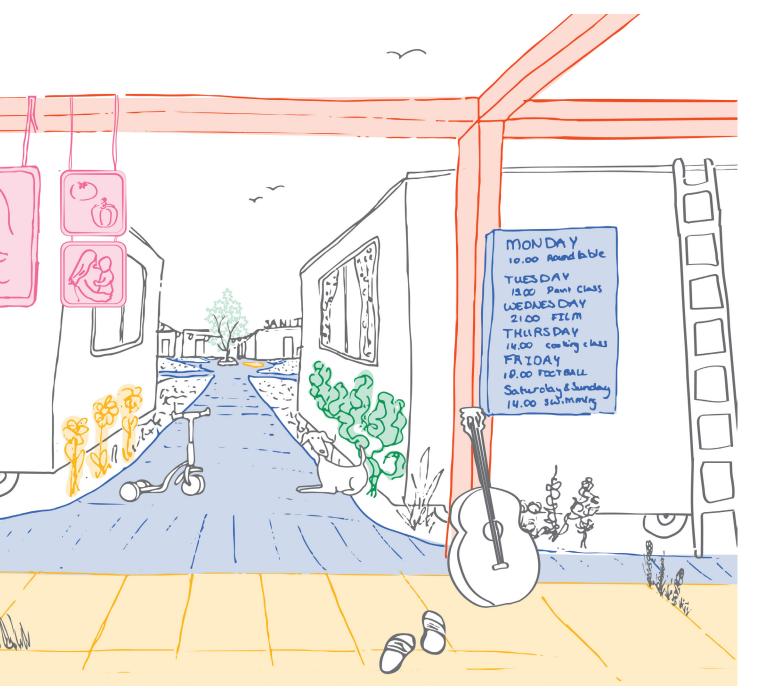


Fig. 94: View to the courtyard [own work, 2025]

Our Courtyard

The family enters the courtyard, which is called the Pit, it looks cosy and child-friendly. The children want to play with marbles, the parents want to rest in their new home. The sanitary facilities are next to their isobox, super ideal!

These are some of the used patterns:

- Eat your Veggies: planters are placed on top of the isoboxes to grow vegetables. The bell peppers were sown by a former resident, the current one just harvested them.
- Small to Big: the marble track and the swing are small scale play interventions.
- Steps to Sanitary: the toilet and shower facilities are located within the courtyard, only a few steps away.
- From Trash to Treasure: the recycle station is located aside the sanitary facilities
- Areas of Appropriation: the front garden is the space to appropriate
 with furniture, canopies or other things. The canopy was designed by
 a former resident, and given to the swap shop when they moved away.
 The current neighbour chose this canopy in the swap shop!

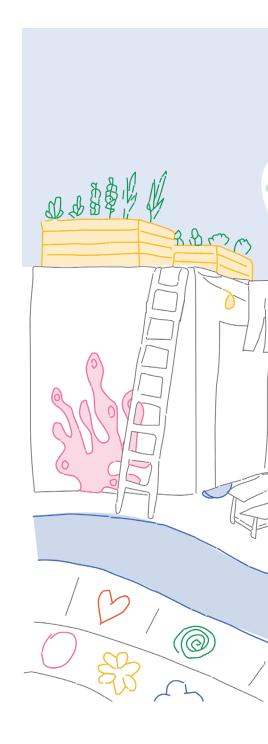




Fig. 95: View of the courtyard in the pink rabbit cluster[own work, 2024]

Our Courtyard

This map shows the top view of the courtyard of the newly arrived family and the two other courtyards of the pink rabbit residential area. They share the communal kitchen, located on the square amidst the three courtyards.

The patterns visible in this plan view are:

- Play and Meet in the Middle: the squares are spaces to sit, chat, and play with neighbours.
- Safe to Play, Made to Move: the roads have different materials in comparison to the squares where children can meet to play.
- Tactile Textures: the ground surface of the courtyard is self-binding gravel. This material creates a surface resistant to scuffing and being kicked all over, while remaining less rigid than concrete for example. When pathways are unused, vegetation is allowed to encroach, creating a soft, natural look by blending the path edges into the surrounding landscape.
- Chosen Configurations and Move my Home: the housing in this courtyard can be rearranged easily according to the needs of residents.
- Eyes on the Street: a courtyard typology naturally offers social safety as entrances open up to the courtyard.





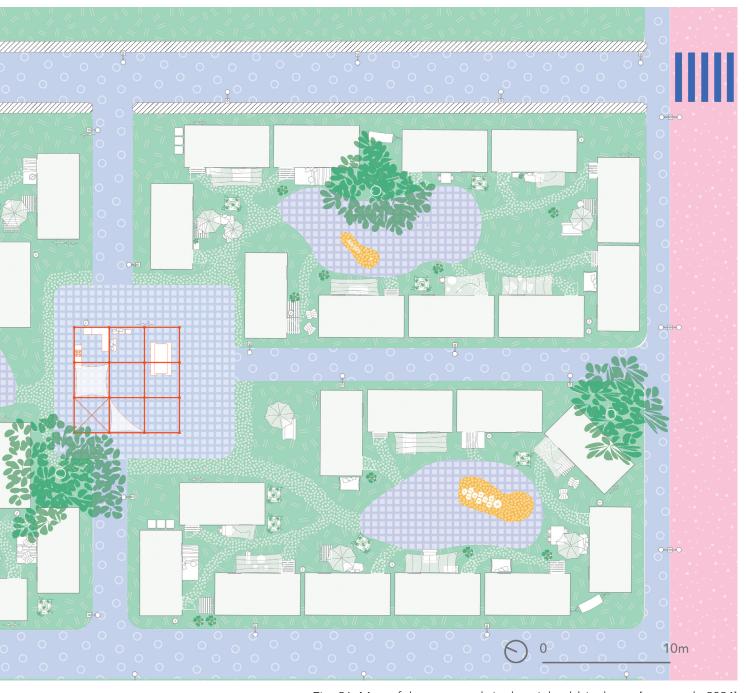


Fig. 96: Map of the courtyards in the pink rabbit cluster [own work, 2024]

Passing Main Street

Along this main street some shops are located, with a terrace in front to have a drink and a chat. The objects depict how this space has a social character, for parents and children. The road leads to the hill full of facilities. The different materials show where to play, drive, walk and meet.

Some of the represented patterns are:

- Jobbortunity to Parenting: residents can work as tailor or carpenter or else in one of the shops.
- Trash to Treasure and From Tools to Tables: household items can be fixed in the repair shop.
- Seasonal Weather Wishes: the canopy provides shade and shelter from rain.
- Eyes on the Street: the facilities located along the road provide social safety.
- Safe to Play, Made to Move and Tactile Textures: the diverse ground surfaces suggest different uses.
- Rise to the Heights: the facilities located on the hill are accessible for everyone with sufficient roads leading up.
- Customized Classes: every Tuesday a paint class is organised.



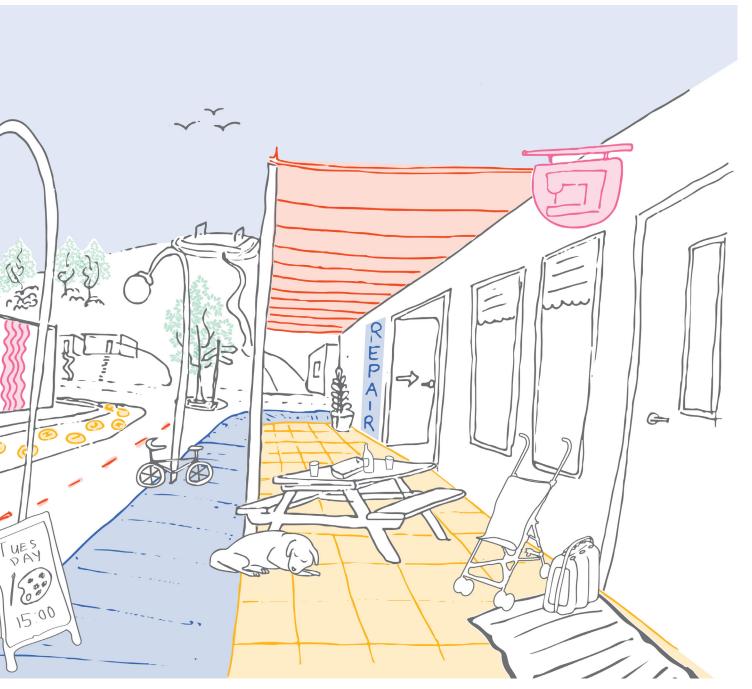


Fig. 97: View to the hill from the main street [own work, 2024] $\,$

Play on the Hill Slides

This playground is bounded in space, allowing children to play safely. The play equipment is supported by the elevation of the hill. The children play amidst natural vegetation, benefiting their well-being. The sandpit gives extra play opportunities and protects against injuries.

Some patterns are present:

- Small to Big: this is a bigger playground in camp, where older children can play by themselves or younger children accompanied by parents.
- All types of Playce: the playground stimulates all types of play. The
 moving type through climbing and sliding, the building type by
 building castles in the sand, the rest type with the bench to look at
 others and the fantasy type in the playhouse on the hill.
- Play with Me: the bench aside the playground stimulates parents to accompany their children in playing.
- Climbing the Trees: interaction with greenery is stimulated by the trees and plants in and around the playground.
- Rise to the heights: the slides use the hill elevation are accessible by stairs as well as a slope.





Fig. 98: Playground on the hillside [own work, 2025]

Our Blue Belt

From the highest slide, this is the view on the blue belt. The children can easily recognise their pink rabbit, to navigate themselves to their home.

The patterns most clearly visible here:

- Belonging through the Scales: the blue belt is depicted, the roads separate residential compartments, which are divided in three courtyards again.
- Guide the Way: each residential area has an orientation pole with an animal to guide residents in camp. The blue belt is highlighted with a sign as well.
- Climb the Trees: every courtyard has at least one tree, so all residents have greenery in their direct surroundings.



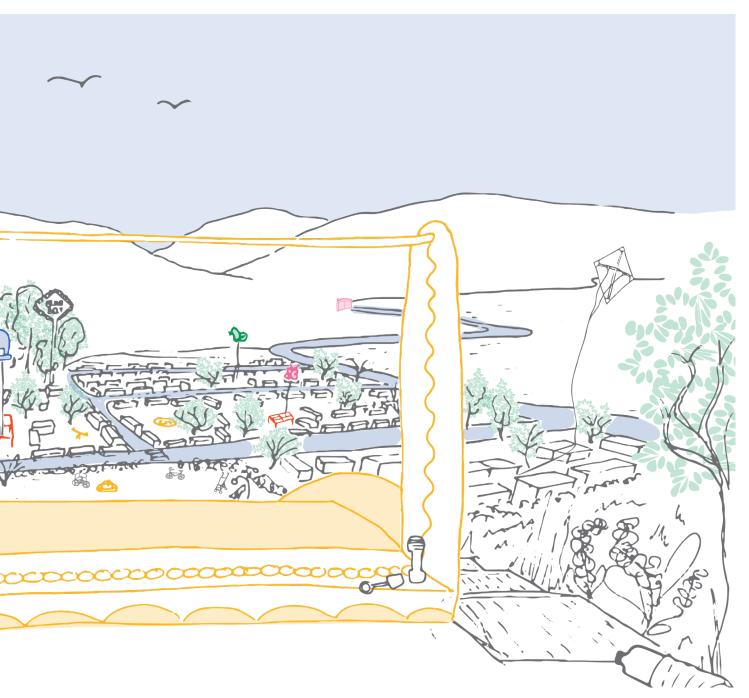


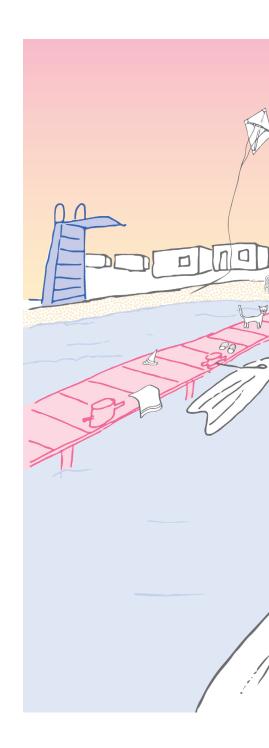
Fig. 99: View on the blue belt from the highest slide in the playground [own work, 2025]

Seal Shore

Various water-based activities are offered to residents, thereby returning the negative experience of the crossing to a positive relationship with the sea. The beach is a place of meeting and relaxation.

The patterns most clearly visible here:

- Sea the Fun: Toddlers can play safely in the paddle pool, children can go down the water-slide and teenagers can learn to surf. Sometimes children take a boat out into the bay to fish.
- Sea the Opportunities: adults can dock at the pier with their fishing boats.
- Daily Diversity and Jobbortunity to Parenting: In and around the water there are many activities possible. Adult residents can contribute with their talents, for example by giving swimming lessons or selling food at the beach.
- Rise to the Heights: The elevation of the hill is used for the construction of the water-slide.
- Areas of Appropriation: a beach is a perfect example of a place to appropriate by your towel, sun umbrella or by building sand castles.
- All Types of Playce: The sand beach and the water provides play opportunities for every type, like building sand castles, swimming, watching others or playing dolphin.



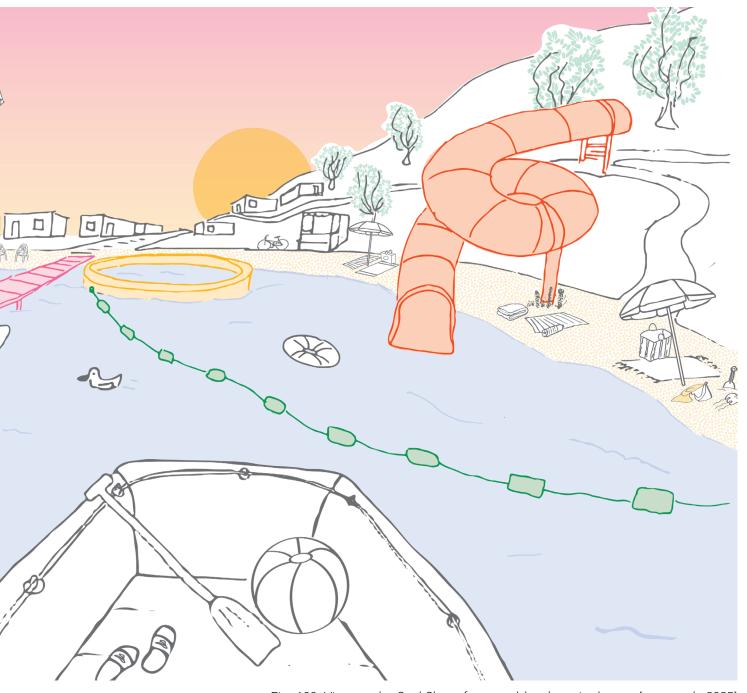


Fig. 100: View on the Seal Shore from a rubber boat in the sea [own work, 2025]

Our Nostopia

This map [Fig. 101] is the main answer to the last subquestion *How can Nostopia Mavrovouni be envisioned by using patterns?* The camp has become the nostopia, it stimulates the homo ludens by different activities. This vision transforms Mavrovouni into a playce like home.



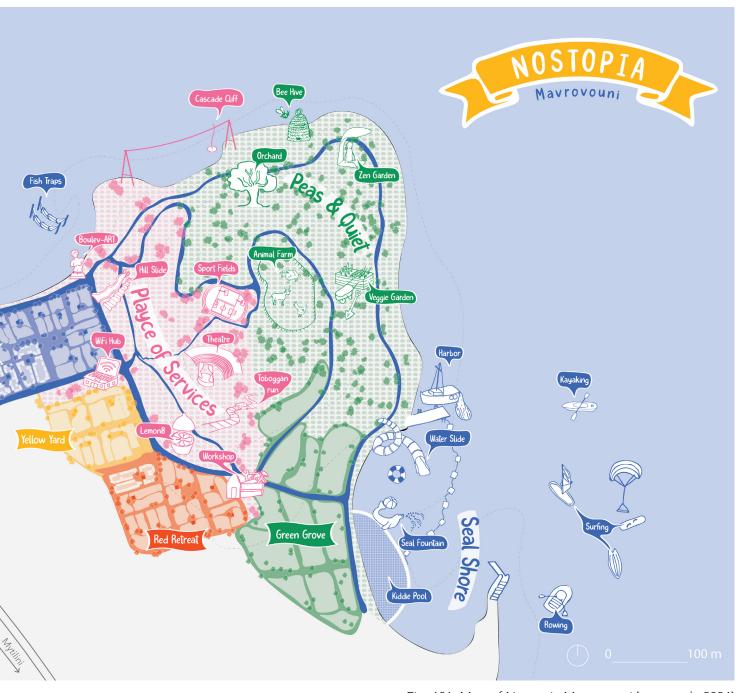


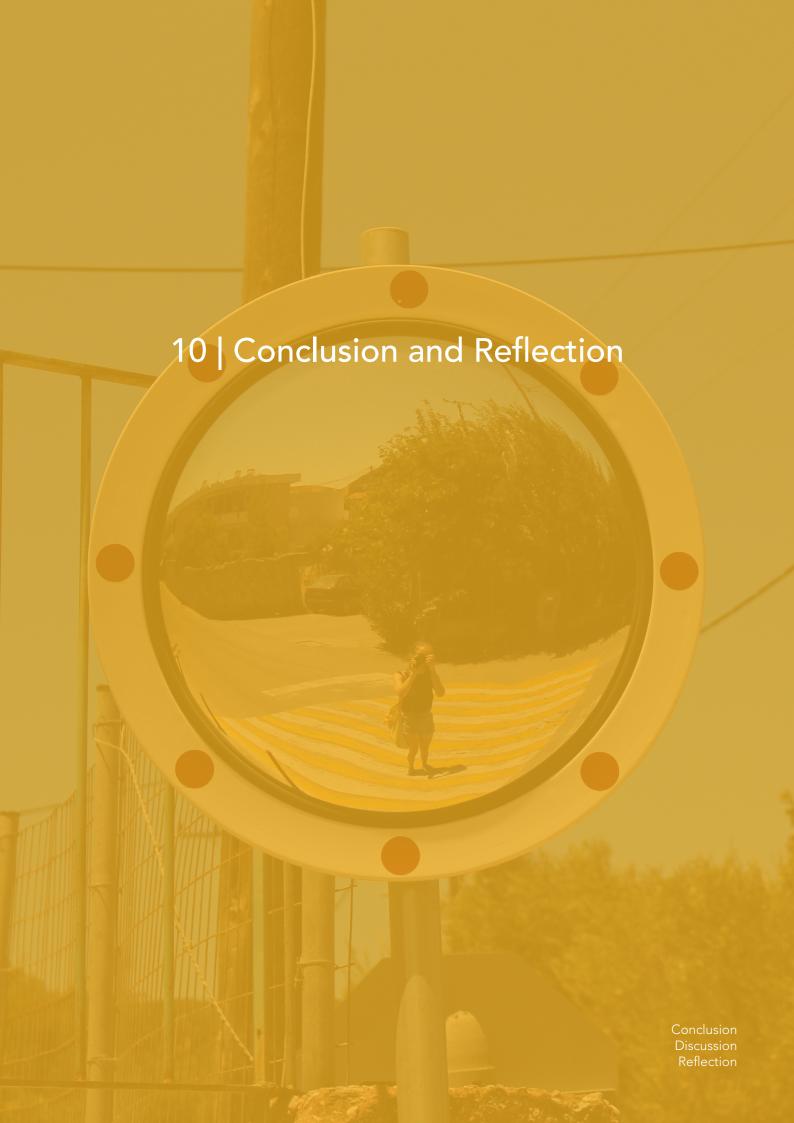
Fig. 101: Map of Nostopia Mavrovouni [own work, 2024]

Reflection Theme Park Inspiration

The theme park, a positive heterotopia of entertainment, contrasts with the refugee camp, a negative heterotopia marked by boredom. The use of this juxtaposition proved valuable, particularly due to two significant similarities between these spaces. First, both spaces are tightly controlled, with clear boundaries and regulated behaviours. The environments are strongly regulated: theme parks guide visitors through carefully designed layouts and scheduled activities, whereas refugee camps enforce rules to manage daily life, such as housing arrangements and food distribution. Second, both are spaces of temporality; the stay is finite. In theme parks, this often means a visit of one or a few days, whereas in refugee camps, it typically lasts several months. Nonetheless, departure is inevitable in both contexts. The combination of temporality and control makes these spaces inherently resistant to appropriation. This stands in contrast to the concept of agency, which is crucial for fostering a sense of home. Hence, the aim was not to create a Theme Park but rather to present a vision of a nostopia.



Fig. 102: Sign with opening hours aside the entrance [Eftepedia, 2003]



Conclusion

The main research question of this thesis was How can play be used to create a vision of heterotopia Mavrovouni that provides a sense of home for displaced children? First a small recap of the sub-questions will be given, to lead to the answer of the main research question.

How can the concept of topia benefit re-envisioning the refugee camp in relation to home and play?

A refugee is undergoing a journey from a dystopia to a utopia, but ends up in a heterotopia, a refugee camp that lacks a sense of home. By aiming for a nostopia, or a playce like home, the negative perception of the refugee camp is transformed into a more positive environment where play becomes an essential component in this transformation.

What are the spatial characteristics of the three homes along the route of displacement?

The spatial characteristics can be divided into two categories; the configuration of space and gathering spaces. In Aleppo the fabric is organic and uses multiple territorial steps, for example through the courtyard morphology. This is contrasting to Mavrovouni as well as Manderspark, which have a grid structure and rigid transitions from public to private. Gathering spaces are important in the urban fabric of Aleppo. In both camps communal spaces are minimal, meeting neighbours mainly happens at basic facilities. These spaces of gathering should protect from sun and rain, canopies are appreciated on all locations. Where the citadel on the hill in Aleppo is a source of pride, the hill in Mavrovouni is barely used.

How do children and parents live and play in CCAC Mavrovouni?

Children go to school everyday, but parents face monotony, their only daily obligation is going to the foodline. This can cause boredom and may impair their mental health. Residents appropriate the space in front of their shelters which gives a sense of belonging. However, people lack agency, they are not able to make choices about their lives or possessions. Thereby, the heat and gravel pressure safety during daily activities.

Conclusion

What are the objectives to design CCAC Mavrovouni as a living environment that evokes a sense of home?

The three main objectives of this pattern language are safety, agency and belonging, as these are crucial emotions in our experience of home according to literature. The answer to the previous sub-question validated these objectives. These abstract goals are broken down into more concrete ones by means of an objective tree.

What patterns contribute to a sense of home in CCAC Mavrovouni? The pattern language provides a comprehensive set of patterns that respond to the three main objectives based on the definition of home. All patterns are presented in a booklet, accompanying this thesis. The whole booklet is the answer to this sub-question. The pattern language lays the foundation for the envisioned design.

How can a pattern language be a playful tool for design? The pattern language can evolve into a design game, where stakeholders collaborate by combining pattern cards. This engaging game can be used to gain input for the spatial design.

How can Nostopia Mavrovouni be envisioned by using patterns? The final map and accompanying eye-level drawings, all derived from the pattern language, offer a visual representation of how Nostopia can be realized at Mavrovouni, giving the camp a sense of home.

Conclusion

Coming back to the main research question: How can play be used to create a vision of heterotopia Mavrovouni that provides a sense of home for displaced children?

Several uses of play emerged in the design process:

- Play can be an inspiration, on different scales and for different purposes.
 Where playing behaviour gave inspiration for some patterns, the most playful place, a theme park, was the main inspiration for the vision.
 Using the extreme of the theme park gave the refugee camp the character of a holiday park, also a temporal home.
- Play can be a tool for design by using the pattern language as a base for a design game with stakeholders.
- Play can drive change, like the change of the narrative of a refugee camp from a negative heterotopia towards the nostopia.

In conclusion, play, as an intrinsic part of human nature, proves invaluable in the design process, offering both conceptual and practical benefits in creating environments that nurture a sense of home.

Discussion

This thesis started with the journey along three homes, which were analysed on multiple aspects. Although this was useful background information, the further integration of the three homes along the route remained minimal. The visit to Manderspark did provide input for the development of the pattern language and the visit to Gouda validated some patterns. But the pattern language is not yet suitable to use in the Dutch context. The spatial characteristics inspired details of the final design, like the Majlis in the communal kitchen.

The research is based for a large part on personal experiences and qualitative ethnographic observations, making the insights deeply rooted in the specific context studied. The lack of large-scale statistical data limits the generalizability of the findings to other contexts. Although the pattern language may inform design for similar contexts, it is essential to investigate contextual differences to adapt the patterns to unique circumstances.

The low population number as well as the summer weather at the time of the field research has influenced the ethnographic conclusions. Thereby, the composition of the population at that time could be non-typical for the camp. For example there were few unaccompanied minors, although the numbers [chapter 0] suggest otherwise. Repetitive field trips can give insight in the situation through the seasons, which would significantly strengthen the conclusions.

To successfully implement this project, a more comprehensive stakeholder analysis is essential. Such an analysis would provide a clearer understanding of the roles, responsibilities, and power dynamics within the camp, directly influencing the design and applicability of the proposed patterns as well as the game. This especially goes for the organisation as a stakeholder. Because although the camp has an official management structure, NGOs like Eurorelief play a significant role in organizing many camp activities. Clarifying the distribution of responsibilities and authority among these stakeholders is crucial to ensure the designed patterns can be effectively adopted and integrated into the camp's operations.

Reflection

What is the relation between your graduation project topic, the studio topic, your master track Urbanism, and your master programme AUBS? Refugees embark on a journey, leaving their home country in search of a new one, yet they arrive at a refugee camp. This journey structured the thesis and highlighted the refugees being in transit. The main area of study is the refugee camp Mavrovouni; a transitional space. Although the studio Transitional Territories normally focuses on how space changes, the transitional character in this case encompasses the use of the space as a temporal home.

The analysis is executed on multiple scales, from the spatial layout of one home to the whole migration route through different countries. Thereby, the investigation addressed social and cultural domains; for example related to the meaning of home, as well as relevant political structures. This accords to the research approaches taught in the Urbanism track; through the scales and through the domains. Although the environment does not define as urban, it does function as an urban settlement, facing challenges comparable to cities. The study on a refugee camp with its rapidly growing and changing population, can give insight for the design of spaces that can adapt to meet the needs of every human-being.

This project addressed a complex real-world challenge, aligning it with the interdisciplinary nature of the AUBS master, in which the combination of knowledge of (landscape) architecture, urban planning and social sciences is required.

What is the relation between research and design in your graduation project?

The theoretical-methodological framework showed the relation between research and design in this project. The theory offered a foundation for the spatial analysis and inspired the changing narrative, from a heterotopia to the nostopia. Both the literature research as well as the field research informed the pattern language, which functions as a bridge to the design. Throughout this project, research by design was used as an effective method to develop the objectives into a visionary model and eventually into the design of nostopia Mavrovouni.

Reflection

How do you assess the value of your way of working (your approach, your used methods, used methodology)?

In this project I took on an exploratory approach, which is visible in the diverse perspectives and methods that I used. The people of concern [refugees] are put central by integrating multiple disciplines, including psychology, pedagogy, art, and social sciences. This diversity in lenses is reflected in the used research methods, including ethnography, spatial analysis and participatory workshops.

After the field research I had difficulty to start the design phase. On advice of my mentor I first started making a visionary model. This method fostered my creative thinking tremendously. This conceptual model served as a bridge between the research findings and the design, grounding the abstract insights in a tangible form. From there, I began sketching to refine and iterate on the ideas. The process of quickly drafting visualizations in both 2D and 3D helped me to turn the ideas into concrete design solutions. Thereby, the models and sketches enabled clearer communication of ideas.

Additionally, living and working in the context of Mavrovouni was incredibly insightful both for the research and design as well as for me personally. During the month of July, I spent almost everyday in camp, using the same spaces as residents. By walking on the same roads, passing their homes, using the same sanitation facilities, I experienced their discomfort first-hand and gained a deep understanding of their needs. For instance, I felt uneasy stepping directly into a bedroom from the public street, which led to the development of the pattern of territorial depth in the design. Spending a prolonged period within the camp allowed me to gain insights that would have been impossible to capture through short-term observation. This immersion not only informed my design choices but also deepened my empathy for the challenges refugees face in these spaces. The immersive experience combined with the interdisciplinary approach

led to a comprehensive understanding of the refugee situation. This has been invaluable for the development of the pattern language as well as the vision of the nostopia.

Reflection

How do you assess the academic and societal value, scope and implication of your graduation project, including ethical aspects?

Especially as refugee flows are expected to rise, designing temporal homes that meet the needs of all residents, including children, becomes more urgent for society. However, there is a notable gap in research on child-focused design, specifically within the context of temporary refugee camps. This thesis aims to fill that gap.

The final outcome of the thesis is not a blueprint design, but a visionary image. It highlights how the narrative of living in a refugee camp can be altered. The project emphasizes that residents should be able to influence their surroundings. The pattern language and the accompanying game serve as tools to give agency to the people.

How do you assess the value of the transferability of your project results? Although this project focuses on the context of Mavrovouni on Lesvos as a stop on the journey from Aleppo to Delft, the created pattern language makes the project results quite transferable. Although some patterns are strongly related to this context, for example by climatic conditions, the majority of the patterns can be applied in camps all around the world. In each context, the implementation of the pattern can be adapted to the specific circumstances. The participatory game accompanying the pattern language increases the transferability of this project.

If you had the chance to redo this project, what aspects would you approach differently?

After the field trip I spend a lot of time on documenting and structuring the observations and on-site investigations. Only for me to realize that I did not need the data to be quantitative. The use of the space, being qualitative data, was way more important. I started to visually represent this with drawings, making it more understandable for myself and others. It could have saved me a lot of time if I started drawing my findings earlier. The time I would have won, I would have spent designing the patterns. This way the patterns could be subject to more iteration and thus improvement, including testing them with others.





Fig. 103: Me as a teacher assistant during a music lesson in Mavrovouni [Eurorelief, 2024]

"More and more, the desire grows in me simply to walk around, greet people, enter their homes, sit on their doorsteps, play ball, throw water, and be known as someone who wants to live with them. It is a privilege to have the time to practice this simple ministry of presence."

[Henri Nouwen; priest & writer, 1983]

Reflection

How does this project contribute to your development as urban designer? This project explores a unique aspect of urban environments: the temporality of spaces and more specifically heterotopias. While heterotopias exist in every city, they often lack attention in conventional urban design practice. This project deepened my understanding of heterotopias by contrasting a negative heterotopia, such as a refugee camp, with a positive one, like a theme park. By employing an extreme scenario, the project reimagines public space and envisions an alternative future that addresses human needs. The ability to think creatively and critically about unconventional spaces will be invaluable in shaping inclusive and adaptive urban environments. Thereby, the context of Mavrovouni lacks the permanent structures that typically define urban environments. With less restricting elements, it is possible to rethink design of public spaces.

Lastly, I think the pattern language is a valuable tool for me as a beginning urban designer. Although the patterns are based on the specific context of refugee camp Mavrovouni, they are aimed to provide a home in any context. Probably the practical implications would differ in more conventional urban environments, but the objectives of agency, safety and belonging are relevant in every living situation. This tool can help me address the complexities of urban environments, to design spaces that feel like home to everyone.

What are your biggest lessons after this graduation year?

First a lesson for me as designer is to set clear limits on the research and design. Although I think an exploratory approach gives broad understanding, making rigid decisions about including or excluding aspects is vital for the depth of the project.

Secondly, the field trip taught me a lot, about myself and about my privilege. I am so grateful for growing up in a safe environment, with my parents and with so many opportunities in life. The chances I got to study, travel, and develop myself is something I will not take for granted.

Lastly, the quote of Henri Nouwen is the most valuable lesson, I want to walk around, greet people, enter their homes, sit on their doorsteps, play ball, throw water, and be known as someone who wants to live with them.



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Aleppo | Play Behaviour

The most common play activities in Syria are depicted on the cards, along with their playtype, materials and spatial manifestations. The uncommon games will be explained.

- Hajla: this is a form of hopscotch and should be played with a group. Only 4 squares should be drawn on the ground and an object, usually a stone, is needed. You try to toss the stone through the squares, while hopping on one leg. Your feet and the stone cannot touch the lines. This game has multiple manifestations across Syria [Abuqudair, 2013].
- The war occured in: an outline will be drawn on the ground, with the name of a country inside it to represent that country. One kid would initiate a "war" by declaring they are attacking a neighboring country's outline. The other kids representing those countries would then have to run away from the attacker. The attacker would estimate how many steps the defenders could take before being caught in the imaginary war zone. If the attacker estimates it correctly, he/she wins, if not the defender wins. This game seems to indicate that war and the preparation to flee is imprinted in Syrian children. The fear of war as embedded in Syrian culture may have prompted this game [Asaad, 2015]. Further investigation showed that this game also takes place in the Dutch context, it is known as 'landje veroveren' [Jantje Beton, 2020].
- The group swing structure as depicted on the card is not very common in Dutch playgrounds. This swing is shared with a bunch of people and reflects the community spirit in Syria.
- Karate, Soccer and Basketbal are popular sports in Syria. Apart from that there is not really a culture of sport associations.
- Children swim in fountains or irrigation canals, natural water elements barely exist.

















Fig. A1: Main play activities in Syria with their spatial and material needs [Own work, 2024]

Spatial Catalogue

With this catalogue a comparison between the three locations can be made easily. This will inform the new spatial design of Mavrovouni as a transitory space.

Some contrasts between the spaces can be seen already, for example territorial depth is lacking in Mavrovouni and Manderspark. Apart from big fences, public furniture is missing in these spaces in comparison to the city centres as well.

The analysis of the city Mytilini on Lesvos was planned to be added after the field trip. During the field trip the relation with Mytilini appeared less important and the catalog was not developed further.



Fig. A2: Catalo

Mavrovouni, Lesvos	Mytilini, Lesvos	Manderspark, Delft	Historic centre, Delft
military		grid	polder structure
tent container sanitary administration medical care		temporary housing unit	historic station house market square
zones		public entrance	territorial depth
		concrete	
fence gate soccer court		fence	'Delfts stoepje'

og with characteristics and spatial elements of 'urban' fabric on the three locations along the migration route [own work, 2024]

Non-Executed Methods

Structured Observation

Behavioural observations about playing children should be systematically recorded, to increase the verifiability and replicability of the research [Zeisel, 1981]. As an observer I will probably be a marginal participant, as I am first and foremost a volunteer in the camp. For recording devices the camp context gives limitations, photo or video is not allowed [Zeisel, 1981]. Thus the observations will be done with notes, drawings and maps, using a strict format. This systematic approach can facilitate more rigorous qualitative analysis of the observations compared to unstructured note-taking. As described by Zeisel [1981], for observing environmental behaviour the question is "who does what with whom? In what relationship, sociocultural context and physical setting?" [p.136]. This theory was used to create the observation form as shown on the right, the situation of CCAC Mavrovouni was kept in mind.

Semi-structured interviews

If it is possible during the field trip, key informant interviews with camp staff will be done to gain more knowledge about missing play needs. The preliminary questions for this interview are depicted on the right.

Daily life children

- What does a typical day look like for a ch
- Are children entertained all day, or do the
- How often do children go to school? In the

Importance of Play

- How important do you think play is for th children?
- What specific benefits have you observe [social skills, trauma regulation etcetera]

Play & Games

- Which games do you generally see happe
- Are the children testing boundaries and i
- Have you observed any unique or innova constraints of the camp environment?
- How does play differ among the cultures

Challenges and Barriers

- What are the main barriers that restrict re in the camp?
- Which restrictions do parents give their of location, playing with certain people, or

Adults

- How do adults view and respond to playi
- Which play activities are stimulated by p
- Do parents generally supervise their play independently?
- Do children go to their parents when they themselves or seek other adults?
- How are parent-child relations, in compacultural differences you observe?

Plans and Resources

- Are there any plans to improve or expand
- What additional resources would be help children?

Staff Perspectives

- From your experience working in the can humanitarian aid? [aside from other bas
- How do you think the camp staff can bet children?

ild living in the refugee camp? by feel bored? ne camp or somewhere on Lesvos?

e well-being and development of refugee

d from facilitating play activities for children?

ening in the camp? [relate to the 4 playtypes] nto risky play?

tive ways children find to play despite the

present within the camp?

efugee children from engaging in play activities

children for playing within the camp? Related to ype of play?

ng children? arents? Do parents join in playing? ing children? Or do children play more often

are hurt or in a fight? Or do they handle it

rison with staff-child relations? Are there

play opportunities for children in the camp? oful in addressing the play needs of refugee

np, do you think play should be a pillar of ic needs like food, water, and shelter] ter facilitate play opportunities for refugee

Observation Form

Date & Time			
Location			
Dimensions space			
Weather			
How many children			
Age			
Gender			
Adult supervision			
Aural relation parents			
Act			
Spatial objects			
Spatial barriers			
Human traces			
Situation sketch eyelevel	Situation plan view	Comments	

Semi-Structured Conversation Education Team

Participants: Volunteers having worked with kids for 3 weeks or more

Time: afternoon of 17 july 2024, during team meeting

Location: Education trailer office

1. What type of play activities do you see around camp? (Especially related to the playtypes: movement, fantasy, construction and rest)

- Kids love Uno!
- Kids are always in the RUP-halls: a big space, protected with shade, a space to meet their friends & have some freedom. Kids are playing with scooters and bicycles.
- Kids are singing and dancing together (head shoulders knees and toes)
- Kids are playing with marbles a lot.
- Duck duck grey duck (zakdoekje leggen)
- Red light green light (Annamaria koekoek)
- Kids are flying kites when windy & having the resources
- Kids are fishing (with fishing lines)
- 2. How do you think the camp environment should improve to benefit play?
- More child defined areas, dedicated to them, where kids can run around. Adults always hang around the swing sets. The blue rup hall has become that space for kids.
- Children safe zones like playgrounds would be nice, but also forethoughts when planning the camp. Like suburbs in America have the playground in the middle of the neighbourhood. It is somewhere central to gather with your friends & more safe as you are surrounded by the adults.
- 3. What are unique and innovative ways of children playing you have seen in camp?
- Garbage or food bag kites
- Some kids play with boxes

Semi-Structured Conversation Education Team

- Rocks, although sometimes throwing at each other. As games: who
 can throw the farthest in the water, or just as throwing a ball; back and
 forth.
- Building things with pallets, like huts
- The foodline structures are used as jungle gyms
- Children flick the marbles, or they dig a hole and aim for it, sort of golfing with your fingers.
- Worrysome: playing in the middle of the road (with marbles)
- Children cross/race down the hill with their bikes, also worrysome because thats where most traffic is in camp.
- Children play with the carts or strollers of their parents to get water as
- Sometimes they balance their bikes and carts on rocks near the sea, also not the safest.
- Mostly teens are getting up the hill to the soccer & basketball field, younger kids generally not.
- 4. In what way do you think play should get attention in humanitarian aid?
- "Play facilitates connection and community." It is important for just about any kind of development in a child; social and emotional. It is good for them to get some gross motor activity. For children it can be hard to put their feelings into words, they can communicate with the way that they play. Dancing and jumping can help release feelings energetically. So, it is really important for children to engage in play activities.

So, do you think it should be facilitated by activities with a team like us or more by the physical environment or both?

• Of course, this camp is a crisis response and food, water, shelter are the basic necessities. But with all research we have and children being a large part of camp population, play should be more focused on. Yes both (activities as well as environment) Play should not be the very last thing in humanitarian aid.

Workshop Report

I discussed doing this workshop with the coordinator of education as well as the main teacher of the classes I was going to do this workshop in. Both of them were positive about this workshop, in terms of feasibility as well as the educational value and fun for the children. The main teacher suggested that using a translator for the introductory story might be useful. Unfortunately there were not any available in the language that would be most helpful for the classes.

At home I prepared the workshop and simplified the story a bit. As suggested by the workshop explanation I created an example of my favourite place to play [Fig. A5]. The day of the workshop the main teacher was sick, which was an extra difficulty. Suddenly I had to be the main teacher and another member of the education team had to be the stand-in teacher assistant, as this was normally my job.

This class consisted of 4 children from 8 and 9 year old, 2 boys and 2 girls. The class started of quite rocky in multiple ways. There was a fight going on between some of the children, so that took a lot of time. Thereby, instead of the help of a translator, I used a translating app on my phone to tell the introductory story. This did not really work and at the suggestion of my teacher assistant I went straight to explaining the assignment. The children started cutting out pictures they liked, but I doubt if they actually understood the goal. It seemed to be that they just tried to make a nice collage. One child seemed to grasp the goal a bit more, they explicitly said they liked soccer, basketball and anime [left top picture of fig. A6].

The main conclusion from this first attempt of the workshop was that the language barrier influenced the [possible] outcome of the workshop intensely.



Fig. A5: Prepared











example workshop Visioning Play

Fig. A6: Outcomes workshop Visioning Play

Workshop Report

With the experience of the first class, I discussed possible improvements with the teacher assistant in the hour between both classes. We realized using the introductory story would not benefit the outcome. Thereby, the next class was going to have more diversity in age group, some of the older children could help with translating the assignment.

As the children are communicating in Turkish among themselves, I looked for the Turkish word for play, oynamak, and wrote this down on a whiteboard. Secondly I explained space to play in Turkish, oynamak için alan. Thereafter I illustrated the assignment by showing my example collage. With the help of some of the older children the goal of the assignment came across.

The children were enthusiastic cutting and glueing their favourite pictures. There were quite some hike and travel magazines available and a lot of children chose pictures with a lot of nature and mountains. I asked some of them what they liked about the pictures or why they drew some of the things.

The small drawn hut [top left picture of Fig. A7] shows a type of shelter, the child explained that the drawn figures where classmates. This pictures shows some food and flags as well.

On two of the collages the amount of pictures with water and snow is striking. This could show the need for cooling down, as the weather was quite hot on the day of



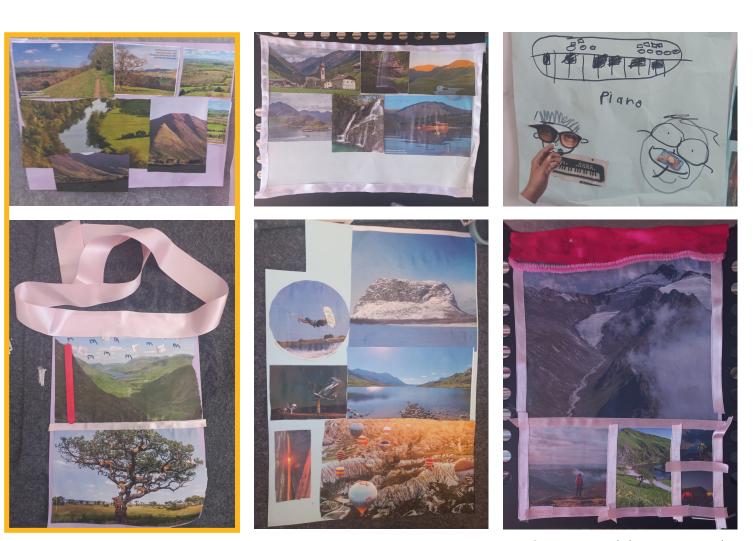


Fig. A7: Outcomes workshop Visioning Play

Spatial Observations

date spatial observation

01/Jul visual relation with Turkey and sea

01/Jul high fences look like a prison

01/Jul everything is white

01/Jul across the bay are restaurants terraces

02/Jul hills around camp: movement difficult

03/Jul People relax & talk in the shade under canopy's, like the foodline structures

03/Jul Trailers of organisations do have colors, residents homes do not

03/Jul Camp is divided into zones, but that is not visual

03/Jul Appropriation of space in front of homes

03/Jul RHUs do not have windows

03/Jul Fences around education area

03/Jul All flooring is gravel

03/Jul Very few trees

03/Jul Skills area: playground for men

03/Jul RHUs and isoboxes are small and lack personality

03/Jul Design of public space is minimal

03/Jul Lego hut is fenced and only open on invitation

03/Jul People relax & talk in the shade under canopy's

03/Jul sanitary facilities men and women are separated by fences

04/Jul residents relax in olive grove, leave trash

04/Jul small alley of isoboxes with improvised roofs over the street

04/Jul With curtain at front door privacy is created, but fresh air comes in

04/Jul living with 2 families in 1 isobox, privacy with curtains

05/Jul community feeling is important in arab culture

05/Jul more flowers and plants would improve it (also shadow & play)

05/Jul Gutters define spaces in camp

05/Jul deck in front of house as seating area, with cushions and blankets

06/Jul dog kennel at Eurorelief

06/Jul Rooms in RUP hall with small corridor

07/Jul Animal sign in green zone for children to remind where they are

07/Jul Foodlines remind of milk machines and theme park lines

08/Jul pallets, carton and blankets create a deck, a step to enter the home

08/Jul Need for shade is big: residents will seek shade elsewhere or have built a canopy

08/Jul huts near the shore where people pray sometimes

08/Jul Sunflowers or tomato plants growing through the gravel

08/Jul Ground is elevated by 1 meter everywhere

09/Jul Walking around camp is tiring, a lot of steps

09/Jul Gutters are very big, barrier for kids

date spatial observation

09/Jul open courtyard spaces or narrow streets would be nice

09/Jul Recognisability for children

09/Jul Provide adaptability to personal needs of living environment

09/Jul ground surface is hard

09/Jul More nature elements

10/Jul Empty Rubb halls are used by children to play, these spaces disappear when camp has more residents

11/Jul one cage with lego for a whole camp

11/Jul touristic beach looks at mavrovouni, separated by waves

11/Jul Majlis in womens community centre

11/Jul education hub is separated by fences, includes play structures & adult classroom

11/Jul men chilling in playhouse bluezone, because of wind and shade

12/Jul adult man sleeping in playhouse in bluezone, sometimes men are chilling up there

12/Jul RHUs do not have airco, very hot, people sleep outside

12/Jul volleybal field inside small RUP hall

12/Jul Foodline crates are used for a lot of things in and around homes

13/Jul fences in Panagiouda are colorful and pretty, contrast with camp fencing

13/Jul camp compared with holiday park, prison, concentration camp

13/Jul Mavrovouni is administratively a CCAC, but 'acts' open like a RIC

14/Jul Camp Moria had more stone buildings, only trash reminds of the former residents

14/Jul empty houses in and around panagiouda, how does that make you feel as POC

17/Jul In blue zone you can find a neighbour kid to play with most times

17/Jul Under the trees in blue zone is also wind, most cool area of camp

18/Jul Turkey is so close, you can see the ferry passing by from camp.

19/Jul Turkey has similarities to Greece, but is more busy & a bit crappier architecture

19/Jul walking to camp from the village is 20 minutes, nice views

20/Jul Mytilini is a city, but feels like a big Greek village, harbour is central in the city

20/Jul high building with statements: close moria & no borders, along the road

20/Jul walk along the coastline with view on panagiouda is beautiful

21/Jul in greece there are chapels everywhere, important architectural element

22/Jul panagiouda and camp have a beautiful sunrise

22/Jul Sea and Mountains makes a beautiful landscape

23/Jul No wind, no shade, no vegetation; perceived temperature to 40 degrees

23/Jul Shadow at the water points makes it also a meeting and relaxing spot

24/Jul By many new arrivals in a few days, camp has to adapt to new residents

25/Jul The size of the classroom and sitting on blankets may benefit the cosy and safe vibes

25/Jul Library has a lot of potential to be a meeting space, with games, books, art stuff. But is not very inviting; lots of wind.

26/Jul Shooting bunkers in the hill of Mavrovouni, close to the soccer field

26/Jul Beauty of Mavrovouni hill, the natural park of the camp (cliffs, view of Turkey) but barely used (shade issues)

27/Jul greek government does not want to update living situation as they think more people will come

27/Jul toilet for disabled people has 3 steps to reach it

27/Jul residents need to check out when going out of camp and check in again

Play Behaviour Observations

09/Jul climbing trees

09/Jul beach ball throwing

09/Jul running and shooting with water guns

09/Jul using marbles to play jeu de boules

10/Jul drawing and playing Uno & matching

09/Jul football with bottles of water

Date Play Location 03/Jul washing clothes and carrying water water place 03/Jul sitting, watching video near isobox 04/Jul shooting football middle of the road 04/Jul playing with mud and trash gutter near the sea 04/Jul sitting, looking, one boy breaks off a metal piece blue foodline rubb hall 04/Jul playing with bikes, scooters, (broken) strollers, plane-toy blue foodline rubb hall 04/Jul throwing marbles and stones blue foodline rubb hall 04/Jul sitting at the edge, looking at the people, blue foodline rubb hall 04/Jul balancing on the ridge blue foodline rubb hall 04/Jul hand clapping game blue foodline rubb hall 04/Jul swinging on the metal structure of the foodline blue foodline rubb hall 04/Jul running with balloons near isoboxes 04/Jul jumping rain puddles road along the coast 04/Jul hand clapping game blue foodline rubb hall 05/Jul ball bouncing near isoboxes 05/Jul watching passersby 05/Jul riding with shopping cart blue foodline rubb hall 05/Jul cuddling and playing with puppys puppy kennel at eurorelief office 06/Jul playing with bikes, scooters, (broken) strollers, ball(oon)s, swinging on the structure blue foodline rubb hall 06/Jul colouring hallway of rubb hall in yellowzone hallway of rubb hall in yellowzone 06/Jul fidgeting and trying to fix broken fishing rod 07/Jul climbing beds and tables empty rubb hall 07/Jul pushing eachother around in strollers camp roads 07/Jul walking through red zone camp roads 07/Jul cycling camp roads, hillside 07/Jul playing with dogs camp roads 08/Jul playing with boxes, as car or to build huts blue foodline rubb hall 08/Jul playing with boxes, as car or to build huts blue foodline rubb hall 08/Jul playing with barbie near isobox 08/Jul sitting and scrolling on phone near isobox 08/Jul getting water, doing dishes water place 08/Jul child on scooter tries to bump researcher on mountainbike 09/Jul flicking marbles open space between isoboxes

trees in blue zone

between isoboxes

empty rubb hall

rubb hall

under trees in blue zone

mainly on roads near rubb halls in blue zone

Date Play Location 10/Jul climbing bed frames empty rubb hall 10/Jul collecting sigaret buds empty rubb hall 10/Jul football with bottles of water, ends in water fight empty rubb hall 10/Jul looking at others empty rubb hall 11/Jul Playgrounds are empty a lot of the time 11/Jul building towers with lego & throwing stones lego hut 11/Jul walking around with push along walking wheel with sound

12/Jul swinging 12/Jul water fight

12/Jul rolling toy car around

12/Jul sitting, watching passersby, talking

12/Jul cycling

12/Jul washing clothes 14/Jul walking with kitten 14/Jul stepping & riding

14/Jul talking and laughing with 'teacher'

14/Jul sitting and watching 14/Jul shooting a ball

14/Jul balancing on the foodline structures

14/Jul walking with baby walker 15/Jul opening milk tap

17/Jul fixing bike chain

17/Jul dancing at 'its time for africa'

17/Jul uno 19/Jul fishing

19/Jul racing on bikes and scooters

20/Jul skipping rope 20/Jul climbing trees

22/Jul sitting in boxes and steering like a car

22/Jul helping with dishes

23/Jul dancing

23/Jul volleybal with resident volunteers 23/Jul chilling and playing with water

25/Jul drawing on whiteboards, looking at books, playing with letters on fridge

25/Jul playing with ball, hoop and dancing

25/Jul helping with dishes

25/Jul bottles of water, fill and empty 26/Jul theatre show with mime 28/Jul driving, riding around

28/Jul climbing on ladder, rollover, handstand

28/Jul drawing with water

near isobox

Play structure blue zone between isoboxes in front of home tribune near front gate rubb hall with beds water place

empty rubb hall blue foodline rubb hall under trees in blue zone under trees in blue zone

under trees in blue zone along the coast road along the coast

blue zone

under trees in blue zone blue foodline rubb hall

water place water place volleybal rubb hall

rocks near the sea and in the sea

library outside library water place sea shore

under canopy at eurorelief trailers

blue foodline rubb hall blue foodline rubb hall blue foodline rubb hall

Pilot Game Report

Remarks on how it works:

- What is the goal? Should all cards be laid down?
 - > No, it's more about facilitating conversations and providing input on how the camp should be.
- The child starts; their needs should be prioritized.
- Joker pattern explanation.
- Immerse yourself in your role!
- Can children participate, or will they have a separate game?
- What about language barriers?
- Individual differences in the clarity of pictures versus text.
- What is the starting square on the game board?
- Does it have to be turn-based, or can it be random?
 - > Just actively respond, no need for turn-taking.
- Indicate contrasting patterns with blocks or other markers.
- Should everything be done consecutively, or can new islands/narratives start?
- A good conversation facilitator and idea generator.
- Allow personal interpretation of patterns.

Other remarks:

- The book 'Tot aan de Overkant': Analyze a child's drawing of a house in Lesbos!
- Residents can say many things, but in the end, decisions are made by Eurorelief or the Greek authorities.
- The organization adapts well but is limited by resources, Greek regulations, and manpower—are the cards too idealistic?

Roles in the game:

Child - C

Resident - R

Organisation - O

Designer - D

Pilot Game Report

Playing the Game - Activity and Privacy:

C: Organized play areas are good, but children often play with whatever is available. It could be safer.

R: Sports bring people together. Sport and play belong together.

D: Should sports facilities be spread across the camp?

R: Yes, different sports need different setups.

Organization: Daily diversity—activities to prevent boredom, facilitated by sports.

R: Activities like communal kitchens also foster engagement and provide a sense of usefulness.

C: I want to know where my parents are during activities—guiding elements are necessary.

O: Structured activities at fixed times create daily rhythms so children can go to bed on time.

C: I need personal space, which is scarce in the camp.

O: Not even in your own container?

C: No, I share it with my family and another family. It's not the same as returning to your warm apartment.

O: Privacy is feasible during quiet times but harder when it's busy.

Playing the Game - Connection & Transparency:

R: Staying connected with family and friends is crucial—internet access is needed.

C: I like playing games on my dad's phone, but I also want to contact family, like my mom in Lebanon.

C: Smaller neighborhoods in the camp would help people get to know others better rather than being surrounded by strangers.

O: "Belonging through the scales" could provide stability.

C/R: Distrust in Eurorelief's promises that things will happen.

D: Transparency in the organization is essential.

O: That's the intent, even if it doesn't always feel that way.

C: What's the practical outcome?

O: We don't make promises.

R: But is that truly transparent?

Pilot Game Report

- D: Transparent communication channels, sticking to commitments, equal treatment, and collaboration with residents are key.
- O: Collaboration is good but complicated—people's positions change when working together.
- D: Should everyone have an equal voice?
- O: Resident volunteers can participate freely if they sign up.
- C: Equal chances for input for everyone?
- R: Suggestion boxes could work, especially for collective ideas.
- D: This aligns with "Raise your voice!"
- O: Why isn't there an app? Notifications about where to be would be handy.
- C: And notifications like "Food is ready!"
- R: Or a map included!
- O: An info point could remain but feel less essential with such tools.
- R: It could just be for information rather than as a help desk—human contact is still valuable.

Playing the Game - Positioning Facilities:

- R: Toilets and other facilities should be nearby—walking far is inconvenient.
- D: What's a good distance? How many homes per facility?
- C: Children's input on toilets is missing. Maybe it's more important to them than we think.
- D: Combining sanitation and water areas with play spaces?
- C: Yes, that would help parents too.
- C: Water spaces could be more colorful to add atmosphere, though children react differently to this.
- O: Likely positive for all children.
- C: Like painted trailers used by some organizations—those cheerful classrooms made a difference.
- O: What's meant by "chosen configurations"?
- D: The current grid-like housing could be rearranged into smaller blocks.
- O: Eurorelief supports housing rearrangements for better atmosphere but prioritizes efficient space usage.
- C: Housing rearrangements could also be more efficient.

Playing the Game - Safe to Play:

C: Kids play near water in the camp, but it's unsafe with the rocks.

C: Children may have water-related trauma without realizing it.

C: Residents see contrasts between Panagiouda and the camp—they can visit the beach there.

D: What's missing?

O: A well-functioning camp organization. Good communication and practical systems matter most before idealistic improvements. Orderliness provides safety.

C: As a child, you adapt to play with what's available, but adults might think the environment isn't suitable for kids. How much of a child's voice is represented in decisions?

D: That's a valid question—adults might assume too much.

O: What do adults want for the child?

C: Safety, a stable social network, and a secure play environment. But these aren't always things children themselves mention.

Playing the Game - Agency & Belonging:

R: Stability with staff is essential—residents and children need familiar faces like consistent teachers.

O: This isn't always realistic due to organizational constraints.

C: It's better for children to live with just their family rather than sharing with strangers.

R: But children also need peers to play with.

R: People should be able to cook for themselves.

C: There is some self-cooking already—electricity is available.

C: Giving residents responsibility within the camp can have positive effects.