NMBU

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LANDSAM

The City for Refugees

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Landscape architecture

NO// Medan dei ventar på at kriser og katastrofar skal passere, bur flyktningar på stader som antakast å berre eksistere mellombels. Denne antakinga er ofte ugrunna, sida krisesituasjonar skal vare i fleire tiår. I mellomtida forblir flyktningleirane og utviklar sosiale og økonomiske funksjonar som ein samanliknast med urban aktivitet. Denne konflikta som oppstår mellom det permanente bygde landskapet (byen) og den mellombels politiske statusen til innbyggjarane (flyktningstatus) er eit globalt fenomen.

Eit nyleg eksempel på dette er flyktningeleiren Moria på den greske øya Lesvos. Leiren blei etablert i 2015 med ein kapasitet på 3000 innbyggjarar, medan den i dag huser over 20 000 flyktningar og har ein

befolkningstettleik som er over dobbelt så høg som den i Manila, ein av dei tettast befolka byane på planeten. Sida Moria-leiren var meint å vere mellombels, fortset flyktningane å bu på ein stad der dei verken er ønske eller sjølv ønsker å vere. Når leirbefolkninga fortset å vakse klarer ikkje nødvendige tenester å halde tritt; tjuveri og vald vert vanleg, og det vert rapportert om dødsulykker regelmessig.

Dette prosjektet bruker urban design for å etablere ein busetnad tilpassa til flyktningbestanden på Lesvos. Gjennom ein diskusjon av flyktningrommet utviklast eit designforslag med mål om å skape eit liv med verdigheit for alle som vil bu i denne 'Flyktningbyen'.

ENG// While waiting for situations of crises and disasters to pass, refugees stay at sites of transition that are assumed to exist temporarily. This assumption is often unfounded, as emergency situations may last for decades. Meanwhile, the refugee camps remain and develop social and economic functions comparable to urban space. This conflict that is developed between the permanent built landscape (the city) and the temporary political status of its population (refugeehood) is a global phenomenon.

A recent example is the Moria refugee camp on the Greek island of Lesvos. Established in 2015 for a capacity of 3000 people, the settlement today houses over 20 000 refugees and has a population density

over twice as high as that of Manila, one of the densest cities on the planet. Since the Moria camp was intended to be transitory and temporary, the refugees continue to stay at a site where they neither want to stay nor are wanted. As the camp population continues to grow, food provisions and health services can't keep up; theft and violence become common and fatal casualties are being reported regularly.

This project intends to use urban design to establish an appropriate settlement suited for housing the refugee population of Lesvos. Through a discussion of the refugee space, a design proposal is developed to provide a life with dignity for everyone living in this 'Refugee-City'.

THE CITY FOR REFUGEES

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Just as birds live best in the air or fish in the sea, so human beings are creatures that live best in the polis.

- Aristotle

PREFACE

This master's thesis marks the end of five years of studies within landscape architecture and has been done in cooperation with the first group of students to partake in the Global Landscape Architecture (GLA) studies at NMBU.

Although my studies over the last five years have largely circled around planning, this thesis is verification of the concept's futility. A sudden turn of events made me abandon at the last minute the idea I had cultivated to be my thesis topic throughout all my years as a student, and instead chase a topic and a line of issues I had never worked with before. Predictably, it was a difficult job to take on. Yet it turned out to be a very interesting topic and it would seem a project was taking form. Then came a pandemic, and again I had to abandon the plan in my mind to adjust to an unpredicted situation.

All planning incorporates a notion of the future, but the future is nevertheless not to be predicted. Under the right circumstances, planning can be a helpful and essential tool, yet, as this project has been an example of, flexibility is key for all execution.

Through all the twists of the project, whenever I have needed it, I have been met by the help and support of the academics at NMBU. I am especially grateful for all help Gunnar Tenge and Knut Andreas Øyvang have given me in regard to map making, and to the professors who have contributed to a thoughtful debate in the GLA classroom. Help was also to be found at the University of the Aegean, where I deeply appreciate the description of the social development of the island made by professor Thanasis Kizos.

Praise is also to be given to those who pushed me through this long semester. This project would never have come into existence had it not been for

My councillors, Jörg and Kerstin, who awakened the initial curiosity within me for the social landscape, and whose pensive agreement or lively dispute have provoked in me a constant search for the wider angle, the higher meaning, the deeper conflict …

My fellow pioneers of Global Landscape Architecture, whose thoughtful conversations and inspiring observations have motivated me to interpret the landscape in new ways …

My friends and fellow students, who through five years of colloquy, field trips and celebrations have become an inspiring part of my life, and who have created a climate of support and encouragement during a semester of hardships and a sudden pandemic …

My parents, Berit and Trond, and my siblings, Ane and Knut, who have encouraged me every step of the way and proven to be vibrant discussion partners in times of need …

And the inhabitants of the Moria refugee camp who graciously invited me into their homes and shared their experiences with me.

LIST OF CONTENT

THE PERMANENCE OF THE TEMPORARY

Over 70 million people are currently displaced from their homes by force because of crises and disasters worldwide (UNHCR, 2019). Over half of these are displaced within their home country, while almost 26 million are defined as refugees, meaning they are living outside their country of origin and meet the requirements for refugee status set by the UN (Agier, 2002). These numbers are only approximations and do not include the substantial number of refugees who are not granted refugee status, such as the "invisible" Afghan refugees after the 2001 American attack, the "illegal immigrants" from the Middle East and Africa crossing the European border, or the "self-settled" Somali, Ethiopian and Rwandan refugees preferring illegality and informal economies over refugee camp life (Agier, 2002; Cue, 2001). According to the official numbers, the majority of refugees originates from Asia and Africa, in addition to the over 5 million Palestinian refugees settled in various Middle Eastern countries since 1960 (UNHCR, 2019).

There are traditionally three durable solutions for refugees: voluntary repatriation to the country of origin, local integration in the country of displacement, and resettlement in a third country (Black & Koser, 1999). From the first day of displacement, refugees live in hope that they will leave, either to go back to their home country or to be settled in a third country. While they wait for this to happen, they stay in the "second country"– presumably temporary.

More often than not, this assumption of temporariness is incorrectly made (Abourahme, 2014). Emergency situations usually last for several decades, and when they end, the humanitarian systems intended to provide help for the displaced people can end up lagging the process of bringing them back home, adding several years to the life of refugee camps (Agier, 2002; Agier, 2011). The average lifespan of a refugee camp today is 12 years (Albadra et al., 2018).

Despite their status as camps, there is an urbanity to refugee camps that derives from their size, population density and layout, as well as their internal development of social and economic activities (Boano, 2011). This urban development that is mobilized by the refugee population itself produces urban space that, together with the longevity of the settlement, adds a dimension of permanence. This combination of the quasi-permanent built landscape, and the temporary political status of refugeehood, is exemplified in camps worldwide (Abourahme, 2014).

One such example is the refugee camp Moria on the Greek island Lesvos, see Figure 1. When it was first transformed from a military base to a refugee camp in 2015, it was intended to accommodate approximately 3000 people (Cupolo, 2015). Shortly after it was included in the European hotspot-system, which effectively made it a funnel for a majority of refugees crossing the European border from Turkey to Greece (European Commission, 2015). The camp quickly started getting international attention when it became evident that it was receiving several thousand more refugees than it was dimensioned for. The Human Rights Watch (2016) described it as "unfit for animals" when it reached 4500 inhabitants. The EU Commissioner for Human Rights described the situation in the camp as "a volcano which could erupt at any moment, over a place in a queue, or a bottle of water" in 2018 when the population was approximately the double (Council of Europe, 2018 p.5).

The beginning of 2020 saw the camp reach 20 000 inhabitants, and this number will likely grow in the future (Eurorelief, fieldwork). Because of its proximity to the Turkish border, Lesvos is a common refugee gateway into Europe, see Figure 2. Most of the refugees who arrive to the island

Figure 2. Refugees arriving at Lesvos being helped by volunteers and locals. Adaptation of a photo taken by Antonio Masiello (2015).

will stay in Moria camp. However, the camp is very reactive to the political climate in Europe, and relocation of refugees from the island to the mainland halts immediately if countries within the continent decide to close their borders. Because of this, the outflux of refugees from the camp and the island overall is lower than the influx, leading to a gradual accumulation of inhabitants in a place that is already facing problems because of its population density.

The extreme density of the camp can be traced back to the fact that it was undersized from its beginning. This has resulted in a lack of both private space for its inhabitants, and of the activities and elements necessary to run its affairs in good order, such as health services and firebreaks (Nutting, 2019). Despite international law, refugee law and humanitarian response standards circling around the concept of life with dignity, the social environment and the prevailing health issues among its population show that the Moria camp does not provide its refugees with dignity (Connelly, 2016; Lowen, 2016; Nutting, 2019; The National Herald staff, 2020). It follows that to improve the situation for the refugees on the island, a new spatial design of the settlement they reside in must be made, one that is realistic of its longevity, of its population numbers and of the issues it faces. A holistic change to the settlement layout would start with a realistic look at the camp as an urban settlement (Albadra et al., 2018).

This project explores the following question and answers it through an urban spatial design relating to the local landscape.

**How to design a city for hosting 30 000 refugees on Lesvos?**

The design attempts to tackle the following set of issues that arise when creating a permanent, urban settlement for a population of refugees in a "second country." (1) In order to identify how the design can be facilitated specifically for the user group of refugees, the project explores how refugee spaces are similar to urban spaces and what specific functions an urban settlement for refugees need to have. (2) To create a city life that the refugee population on Lesvos would agree is dignified, the concept of life with dignity is explored in relation to their urban cultural-historical backgrounds. (3) As refugeehood is temporary and the refugee settlements are not, the project also explores ways in which an urban structure can facilitate for a continuous influx and outflux of people and include this in the design. Thus, the project attempts to answer three sub-questions before exploring the design possibilities:

How to facilitate an urban structure for the use of refugees?

How to facilitate a life with dignity for the refugees on Lesvos?

How to facilitate for a rapid succession of people in a permanent urban structure?
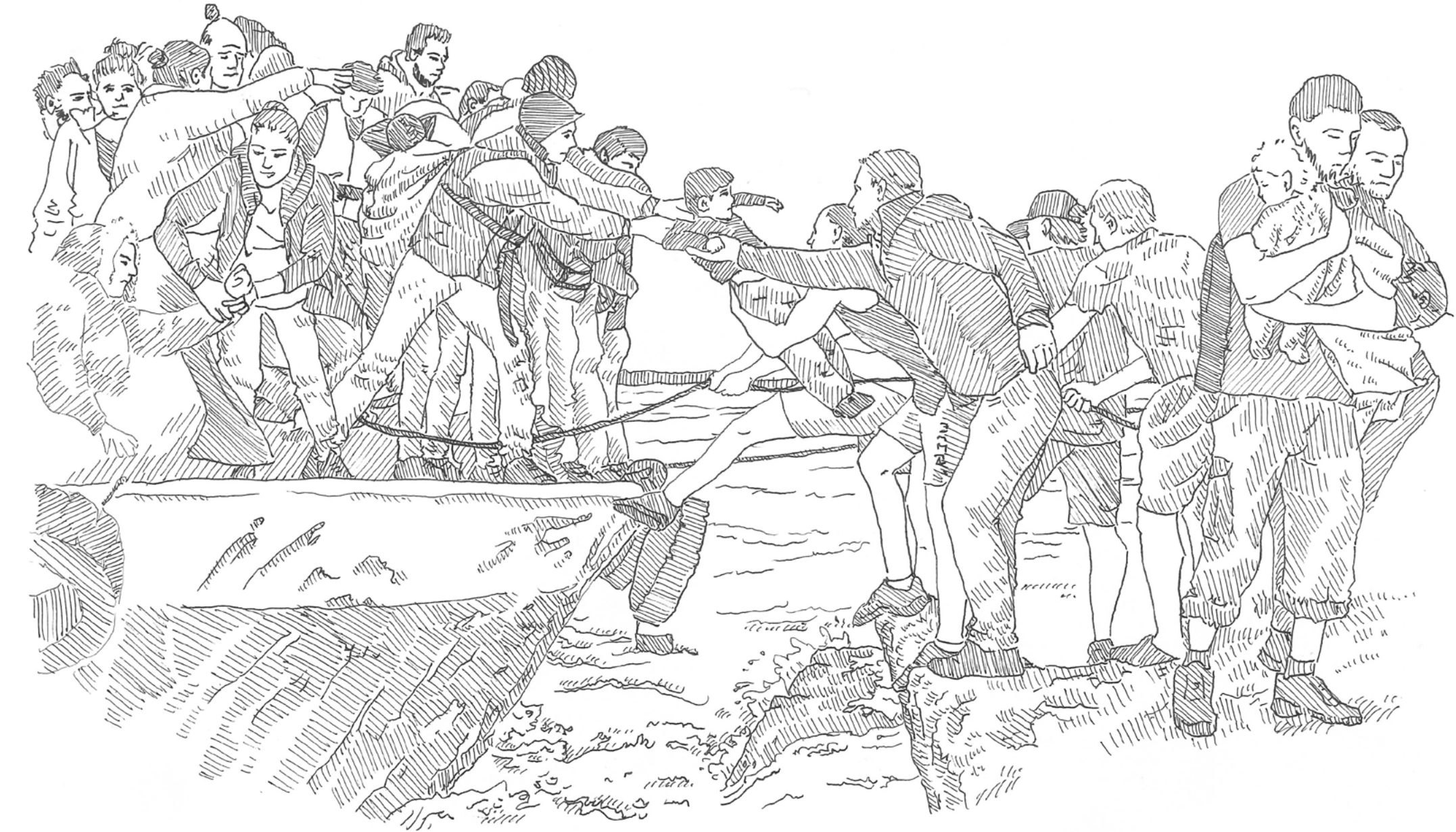
PROBLEM DELIMITATION

By taking the step from the comprehensive works of critical refugee settlement studies (Agier, 2002; Grbac, 2013; Sanyal, 2012) and into design, this project attempts to show what a city for refugees would look like and function. However, designing an entire city is an enormous piece of work that demands the labour of more than one person. The contributions of its inhabitants, the locals, architects, engineers, politicians, economists and many other relevant fields of study are not to be underestimated in order to create the cohesive urban spatial plan necessary to form a functioning city. Because the design that is presented here does not include contributions from other actors, the project will instead build upon a framework of assumptions. These assumptions will confine the problem to such a degree that it will be possible to create a design.

The first assumption regards the role of the Greek government in establishing a city on Lesvos. The cooperation of the host government is vital for establishing a permanent urban structure for refugees. We can make three assumptions about the attitude of the government:

1. Assume that the Greek government, as the first in the world, will acknowledge a refugee settlement as a city, and provide all necessary help during construction, maintenance and administration.

2. Assume that the Greek government will not acknowledge the settlement as a city, yet will still provide necessary help during construction, maintenance and administration.

3. Assume that the Greek government will neither acknowledge the settlement as a city nor provide any help.

Though the last assumption might be most likely, this project builds upon the first – that **the Greek government would be open to construct and support an entire city solely for refugees**. This would include providing the necessary land, materials and workforce needed, as well as treating the settlement as a city able to administer and maintain itself, instead of as a camp in constant need of outside help and control. It is important to underline that the contribution of the local Greeks is necessary for the longevity of the city.

The next assumption regards what functions of the refugee camp the city would keep, which is largely related to the succession of people settling in the city. One of two assumptions can be made:

1. There will be a continued succession of refugees. All refugees will be relocated to be permanently settled in other countries, making the city have a constant and rapid change of inhabitants.

2. There will not be a succession. Most of the refugees will not be moved from the island, making the city have a permanent group of refugee inhabitants.

By looking at other refugee camps in the world (see page XX) it becomes evident that the last assumption is most likely. Yet this project builds upon the first - that **the city would function the way the refugee camps on the island are meant to function.** This is because the city is meant to be an alternative to the traditional refugee camp, not a final destination, and thus should retain the camps' necessary functions. It follows that the city would receive the hotspot-status as well as the residents of the Moria camp in a massive feat of transfer that this project will not cover. However, like the camps on the island, the city would face the fact that while some refugees stay in the settlement for weeks or months at a time, some might stay for several years before having their asylum application accepted and being relocated to the mainland. Due to the fact that the city, similar to the camps, would
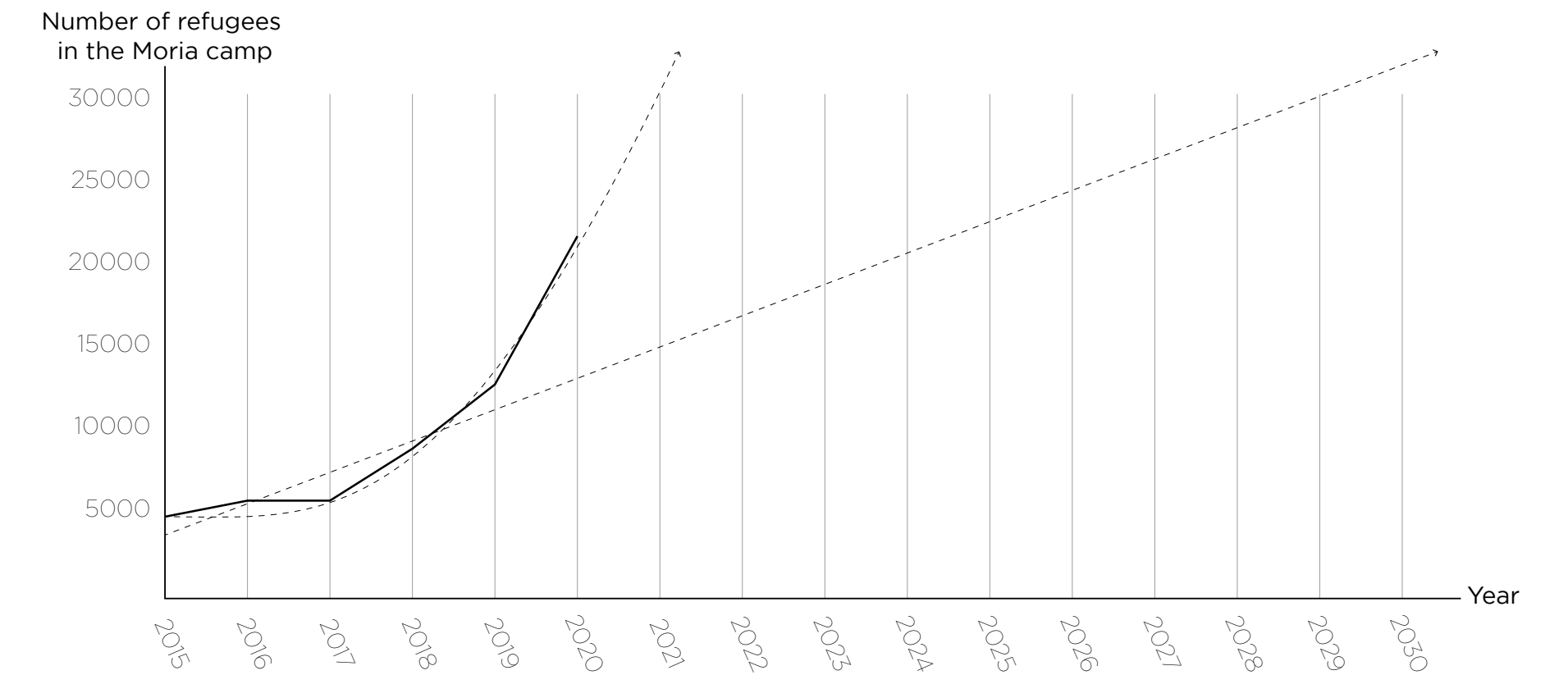
only be open to house refugees, integration with the host culture is not the main focus of this project – tolerance among cultures within the city is.

The third assumption is that **the population of the city would be 30 000 people.** This number might be too low or, though unlikely, too high for the actual population of refugees that would be present in the settlement. As shown in Figure 3, the refugee population on Lesvos is likely to increase and the assumed population of the city could just as well be set to be 20 000, 100 000 or even 500 000, providing different sets of problems that would need to be faced. The reason behind deciding on the specific number of 30 000 is further explained in the chapter "The City".

This leads to the next assumption, which is that the city would be ready for use before the population reaches 30 000. Fieldwork and news articles help estimate a growth trend that show that the Moria refugee population can be expected to reach 30 000 between 2021 and -29, as shown in Figure 3. These numbers are reactive to factors such as political incentives and international crises and disasters, and the calculated growth can therefore not be accurate. For instance, despite extreme growth last year, the population has unexpectedly stagnated this year because of COVID-19. It is near impossible to predict future development. For the sake of the framework of assumptions, however, we can assume that **the island will have reached 30 000 displaced people by 2025, and that the city would need to be ready to open before then.**

How long the city would be used by the refugees is even more difficult to predict but based on the lifespan of refugee camps today, it is likely that it would be active for several decades to come. **Once it is not in use by refugees anymore, the city would need to find a second use**. This will not be explored further in this project.

These four assumptions – that of the role of Greece, the role of the city, the number of refugee residents and the timeframe – together with the assumption that the city would find a second use, creates a framework possible to ground the project in. From this grounding a design is built.

Number of refugees in the Moria camp

30000
25000
20000
15000
10000
5000

2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030

Year

Moria
refugee camp

Panagiouda

Moria
village

Kara Tepe
refugee camp

Mytilene

METHOD

As the main question of this project asks for an urban spatial design for refugee use, refugee life and the local landscape need to be explored before a design proposition can be formed. Through fieldwork and a literature review, principles that should be included in the design of a refugee city are identified, before being implemented on site to form a spatial design.

ACQUISITION OF KNOWLEDGE

The acquisition of knowledge has been done through a ten-day fieldwork to the island of Lesvos, in addition to a literature search. The fieldwork was especially important, as a lot of information about the camp and its residents is held locally and is very difficult, if at all possible, to find in published media.

FIELDWORK

In order to examine the design of the Moria camp today, the relationship between the various groups of refugees, as well as the relationship between the refugees and the local people, I spent ten days on Lesvos in January 2020. The fieldwork was carried out within the framework of a student field course organised by the School of Landscape Architecture at NMBU. The majority of the time was spent in the area around the city of Mytilene and the Moria camp, see Figure 4. Hand drawings, sketches, notes, photography and video captures were used to document the life and landscape on the island, see Figure 5.

The first days were spent trying to get an impression of the landscape forms, bedrock, vegetation and urban development of Lesvos. As the project circles around establishing a city on the island, it was important to document the architecture and building practices of local cities

and villages to be able to adjust the new city to these. The landscape was investigated by walking, hiking and spending time in Mytilene, Moria village and Panagiouda, as shown in Figure 9. By visiting the University of the Aegean, we learned about the history and development of the island and had the chance to talk to employees and students who worked with refugees.

I then focused on documenting the recent development and the daily life in the refugee camp, in order to identify what issues the refugees face. In January, three refugee camps were in operation on the island; PIKPA, Kara Tepe, and Moria. Both PIKPA, which is run by the NGO Lesvos Solidarity and has a capacity of 120 people, and Kara Tepe, run by the Municipality of Mytilene with a capacity of approximately 1500 people, are well administrated and do not accept uninvited visitors on their grounds. Though I talked to a student who volunteered in the Kara Tepe camp, my visits were solely to the Moria camp.

A great deal of time was spent trying to gather information about the Moria camp, but the lack of proper and holistic administration made this difficult. Since the NGOs effectively run the camp and there is little to no communication between them, it is very difficult for anyone who works there, let alone anyone who is visiting for only ten days, to get an overview of the affairs of the camp. After several days we found a very useful whiteboard operated by the NGO Eurorelief, who is in charge of receiving and registering the refugees, that informed us that there were 19 184 refugees in the camp on January 15. This is more exact than any number we could find online or anywhere else and is what I've based my refugee population estimates on in this project. As the refugee population in Moria grows every day, there is reason to believe that the camp had over 20 000 inhabitants by the end of our stay. The whiteboard is pictured in Figure 6.
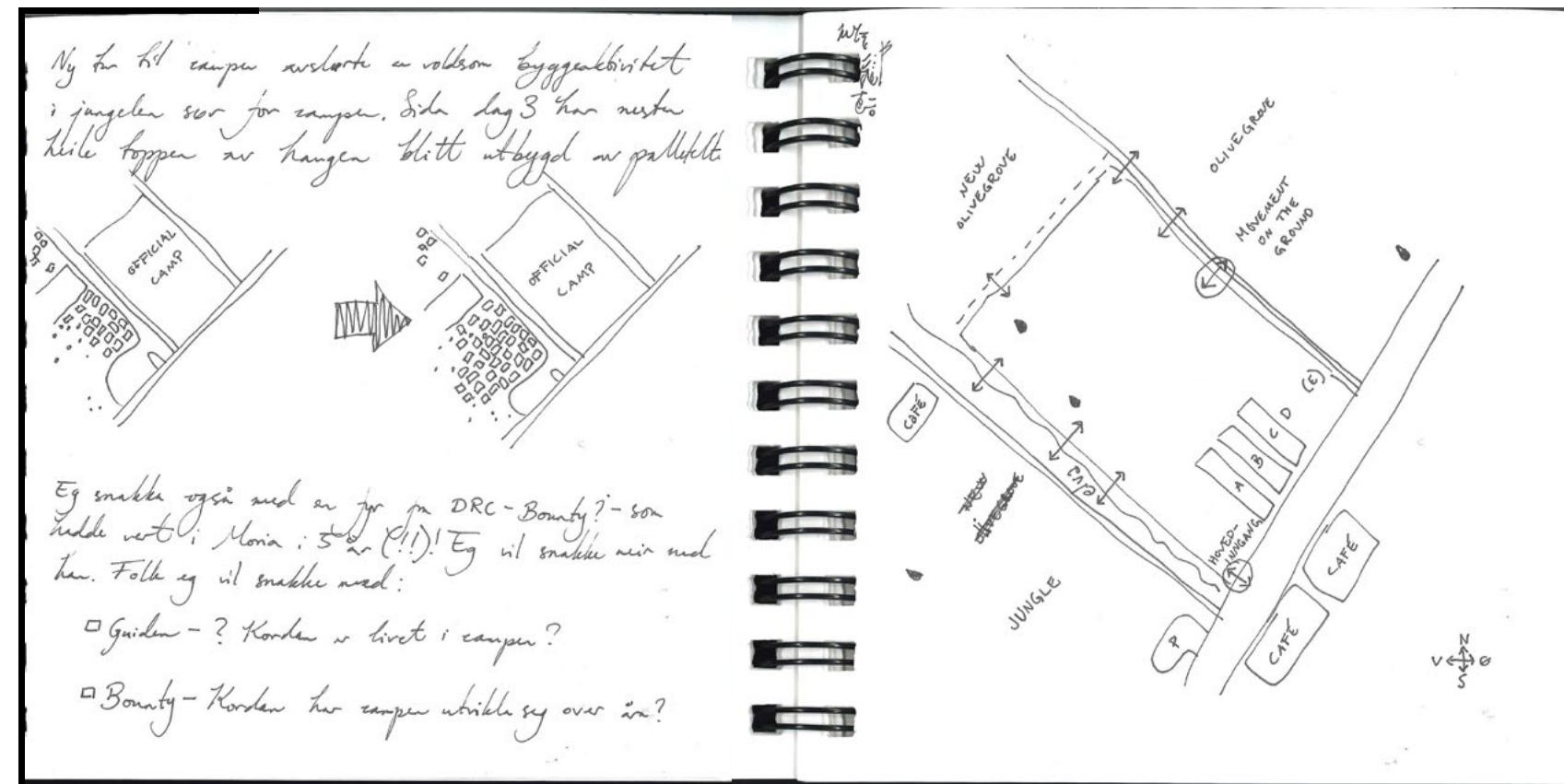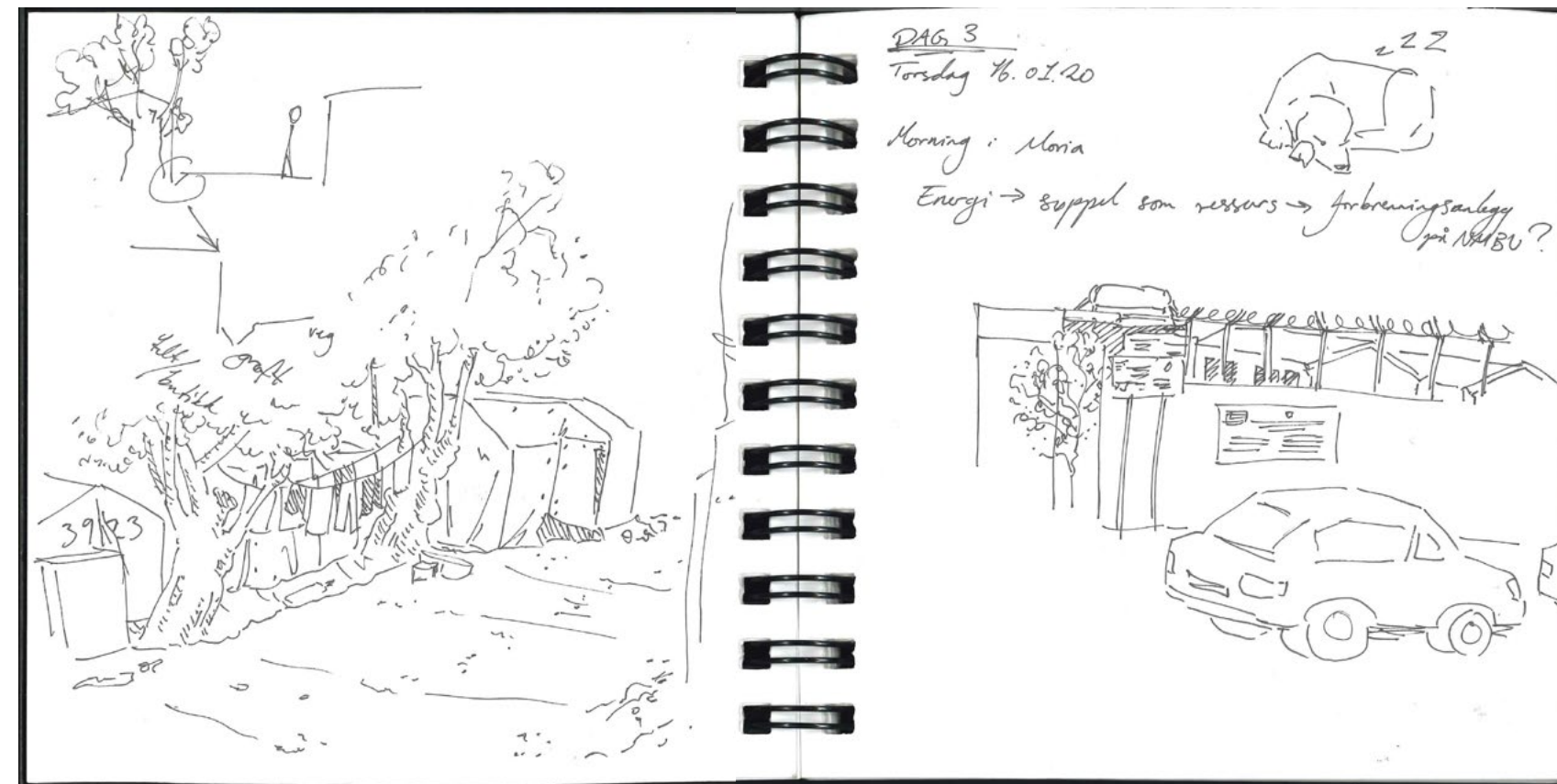
I met and talked to roughly 30 men, women and children, either travelling alone or with their families, who could help explain the daily life in the camp for me. They originated from Afghanistan, Syria, Somalia, the Democratic Republic of the Congo (DRC) and Nigeria, and not all of them shared a language with me. The Google Translate-app was therefore diligently used to understand each other. We were graciously invited into several tents and served tea while listening how they ended up in Moria and what their everyday life was like there.

Informal conversations were also held with local Greeks in Mytilene and highlighted how people held different views on the refugee situation. Despite the prominent image displayed by international news outlets, many of the islanders have sympathy for the refugees and want to help them in the ways that they can.

We were also witness to two protests; one held by refugees outside the Moria camp, another held by local and mainland Greeks in the city of Mytilene. The refugee protest occurred spontaneously after a young man from Yemen was killed by a small group of refugees five days after we arrived on the island, see Figure 8 (Siegfried, 2020b; TNH Staff, 2020). The reason for the murder is unknown. The climate of the camp became turbulent in the early morning hours, and the police decided to intervene in full armour. Garbage containers were lit on fire and there was reportedly use of tear gas by the police, though this could not be confirmed.

The protest in Mytilene happened about a week later and had been approved by local authorities. This was a political protest against the Greek government's handling of the surge of refugees that had arrived on the island. The governor of the North Aegean region, Kostas Moutzouris, announced the strike by claiming that the transfers to the mainland had failed to keep up with the pace

of new arrivals (Siegfried, 2020a), and the slogan "We want our island back" was used. All shops were closed as people arrived from the mainland and joined with some locals to march in a protest, see Figure 7.

The information I gathered during my stay revealed several issues, big and small, that untreated will continue to gnaw at both refugees and locals. However, after I left and attempted to process the information, the situation has developed to create more problems and worsen the living condition of the refugees. Most notable is the COVID-19 outbreak, that forced the NGOs off the island and has stopped all inflow and outflow of refugees. The virus is especially dangerous for people who live in densely populated areas with minimal health services and stopping all influx of people to the camps has unfortunately been vital to minimize spreading the disease. Although it might be discouraging to do, reading news stories from Lesvos and particularly the Moria camp has been important to keep updated on the situation. A collection of relevant news stories released from the beginning of the year until the publishing of this thesis in August 2020 can be found in attachment 1.

ETHICAL CONSIDERATIONS

Many refugees flee their country to avoid persecution and can be put in danger if their persecutors recognize their location. Because of this, refugees are considered an especially vulnerable group. To protect this group, no identifying features are included in photos where refugees are present taken during the field trip, and no notes have been made that includes any names, ages, nationalities or any other identifying features. From the informal field conversations that were carried out, no personal information has been recorded that could help identify the individuals.

LITERATURE

A literature review is meant to detect information that already exists within a chosen framework (Oliver, 2012). The literature included in this project consists mainly of published articles in renowned journals found through Google Scholar and the NMBU library as well as the Sphere Handbook for humanitarian response standards, and are chosen in order to answer these questions:

1. How to facilitate an urban structure for the use of refugees?

2. How to facilitate for a life with dignity for the refugees on Lesvos?

3. How to facilitate for a rapid succession of people in a permanent urban structure?

The answers to these questions have been made to tangibly shape the design proposition. By reviewing published information on these three topics, the project builds upon existing knowledge in order to arrive at a spatial design.

DESIGN

The findings from the fieldwork and the literature are summarised in the design principles that initialize the design. The principles thus define the specific needs of a city inhabited by refugees on Lesvos and are presented before being implemented in the local landscape at a site that is suitable for this specific type of urban development that is to be made for refugees.

At last a spatial design for a city is presented, with urban elements tailored to refugee use distributed in the urban landscape. The presentation explains how the design would look and function.
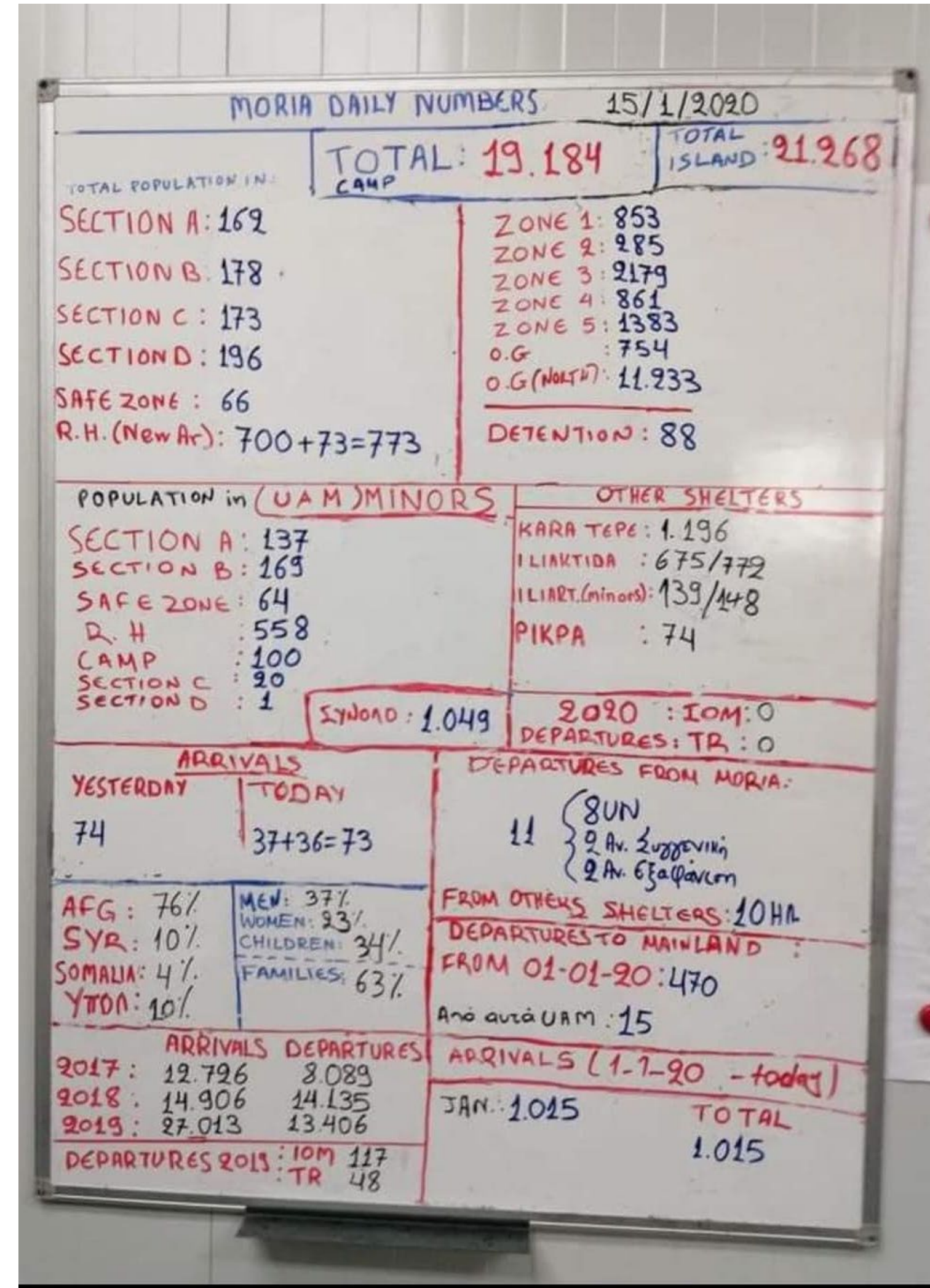
Figure 7. Locals and mainland Greeks gather in Mytilene to protest what they mean is inaction from the Greek government and the EU to reduce the inflow of refugees (Reuters, 2020).

Figure 8. Photos of protests during our stay.
a - Tensions were high in the camp in the early morning after a murder that had happened hours before.
b - Refugees from Moria protesting their living conditions by blocking the road for traffic.

Figure 9.
a - A lot of travelling was done by moped.
b - The fieldwork was done in small groups of no less than two.
c - The tools I brought with me into the field.

ENCOURAGING AN URBAN REFUGEE SPACE

Here the three sub-questions will be discussed in a way that will allow them to feasibly contribute to answering the topic question.

HOW TO FACILITATE AN URBAN STRUCTURE FOR THE USE OF REFUGEES?

A REIMAGINING OF THE REFUGEE CAMP AS AN URBAN SPACE

Statistics from the UNHCR show that the majority of the displaced population of the world originate from Syria (6.7 million), Afghanistan (2.7 million) and South Sudan (2.3 million), in addition to at least 3.9 million stateless people (UNHCR, 2019). The top three countries that this population is settled in are Turkey (3.7 million), Pakistan (1.4 million) and Uganda (1.2 million). Of almost 26 million displaced people worldwide in 2019, about 40% of them reside in rural areas and camps such as Moria (UNHCR, 2019).

The refugee camp is defined as a temporary space in which a displaced person may receive humanitarian aid, protection and shelter until a more permanent solution is found for them (UNHCR, s.a.-b). Intended to provide the minimum level of physical needs for people displaced because of war, natural disasters, political persecution or other conflicts, refugee camps accumulate thousands of inhabitants over periods of time that generally exceed the duration of the emergency (Agier, 2002). The site of the camp is often placed at a distance from existing local socio-economic areas, as a means, either intentional or incidental, to keep the refugee population separate from the host community.

The recognition of all camp inhabitants as victims not only creates a problem of identity that Agier (2002) compares to that of the residents of the Nazi concentration camps, but also efficiently strips them of a multitude of rights, such as the right to work and earn a living, that leaves them without a judicial system to help them affect their surroundings (Sanyal, 2012). Sanyal (2012) argues that the humanitarian apparatus surrounding the refugees "can be seen as benevolent hegemony or even as a tool of colonialism through which developed countries keep the masses of refugees away from their doorsteps" (p. 641). Through these designs, the life in refugee camps is kept at a distance from the ordinary social and political world (Agier, 2002; Agier, 2011).

Conflicts and disaster, as well as other situations that displace people, seem to be commonly viewed as states of temporality of which a state of "normality" will once again be restored in the near future. Because of this, refugee camps are popularly viewed as temporary structures by both the host community and by the refugees themselves. Despite this, situations of conflict are prone to lasting several decades, and the average lifespan of a refugee camp today is over 10 years (Agier, 2002; Al-Nassir, 2016; Albadra et al., 2018). Although officially speaking refugee camps are temporary and transitory places, cases such as that of the Mae La camp in Thailand, founded in 1984 with a population over 35 000 (ReliefWeb, 2019), the Za'atari camp in Jordan, founded in 2012 with a population over 76 000 (UNHCR, 2020c), the Kakuma camp in Kenya, founded in 1992 with a population over 196 000 (UNHCR, s.a.-a), and the Kutupalong camp in Bangladesh, founded in 1991 with a population of over 596 000 (ReliefWeb, 2018; UNHCR, 2020b) are examples of camps that become semi-permanent or permanent without being recognized as cities by their governments.

Boano (2011) states that "the quasi-urban dimension of these settlements comes from their size, population density, layout, concentration of technical infrastructure, socio-occupational profile and the economic activities that develop within them" (p. 46). This production of urban space in the refugee camp is by Abourahme (2014) explained as a complication that opens up a "temporality between the permanence of the built (camp) and the temporariness of the political condition (refugeehood)" (p. 214).

There is increasing recognition that camps are not the best option for refugee settlement (Agier, 2002; Al-Nassir, 2016; Grbac, 2013; Sanyal, 2012; Zetter, 1995), with the UNHCR already in 2009 recognizing that the future for refugee provision lay in the urban, not the rural (UNHCR, 2009). The discussion of the urbanity of refugee camps had already then existed for several decades, with Fredrick Cuny in 1977, on the topic of planning refugee camps, writing that:

"This was the realization that when large numbers of people are concentrated in a small geographic area, in effect a camp ceases to be a camp; in actuality it becomes a town or a small city with all the accompanying problems. A refugee camp must have housing, water, sewers, roads, clinics, fire protection, garbage disposal, parks, schools – everything found in a town. Thus, development plans for refugee camps should be considered with the same detail as a master plan for a town" (Cuny, 1977 p. 127).

Since then, the discussion has evolved to include the social and economic aspects that have revealed themselves as prevailing camps start to resemble young cities. Sanyal (2012 p. 634) explains how the emerging debate centres around whether camps "demonstrate some form of urbanity" and how it is possible to rethink refugee spaces as "city-like with complex social arrangements and economic activities" (p. 634).

There has been little focus on refugee camps as distinctive social spaces in literature (see Black & Koser, 1999). Ramadan (2012) argues that as much as the refugee camp is a tool for international agencies and a terrain of conflict, it is equally a social, cultural and political space. Posselt et al. (2018) identified the social networks of the camp to be formed within communities, families, religious groups and neighbourhoods, and between friends, elders and members of the host community.

With laws preventing refugees from legally engaging in labour, the economic structures of the camp are usually within the informal (Oka, 2011). In accordance with a recorded enormous willingness to engage in entrepreneurship activities among refugees (Kachror, 2019), Oka (2011) argues that the informal food market of the Kakuma camp in Kenya is one of the primary mechanisms to ensure a level of normality in the everyday lives of the refugees.

Grbac (2013) argues that the refugee camp demonstrates urbanity in both its physical space, political community and the exercise of citizenship rights. He explains how the right to the city for refugees do not come from an institutional authority or power, but through political action and social relations. This right enables them to claim ownership over their own social and physical space, and engage with decisions that shape their everyday life (Grbac, 2013).

Through these social and economic activities, as well as through political activism and cultural influence, refugees are actively affecting their physical environment and creating new identities with the emergence of the city-camps (Agier, 2011; Dalal et al., 2018; Grbac, 2013; Sanyal, 2012). Similar to the experience of the urban, there is no universal refugee urbanism (Sanyal, 2012). Refugees, equal to other urban residents, need to be seen as agents capable of creating spaces to suit their social and political, as well as other, needs.

THE REFUGEE CITY AND ITS FUNCTIONS

Essential to the creation of urban space for refugees is to avoid a paternalistic planning where control is camouflaged as seemingly well-intended and sensitive planning (Dalal et al., 2018). Despite the focus in critical studies on refugees as urban actors, new planning approaches quite contrarily tend to shrink spaces of self-determination and self-provisioning of refugees (Agier, 2011; Dalal et al., 2018). Organizing the administration of the city-camp to include the voices of its inhabitants creates a framework that enables the refugees to affect their physical environment (Al-Nassir, 2016; Grbac, 2013; McClelland, 2014).

The host community should be included in the management of the camp and mingling between locals and refugees should be encouraged in order to reduce discrimination and establish social networks (Jansen, 2011; Sphere Project, 2018). This is mainly achieved through socioeconomic measures, such as the organizational structure of agencies involved in resettlement (Scott Smith, 2008). In the Turkish refugee camp Kilis, three Turkish grocery stores staffed with local Turks are the main providers of food, which in addition to encourage mingling between locals and refugees allows the refugees contribute to the local economy (McClelland, 2014; Ziya Pakoz, 2016). This specific method of supplying food is supported and endorsed by the World Food Programme (WFP, 2013). The refugees in Kilis also have a council of elected refugee representatives, that regularly meet to find solutions to problems that the refugees encounter in the camp (McClelland, 2014). Biçer (2017) found that the refugees in Kilis have a generally positive view on Turkish culture, and that there is progress for inclusion of the Syrian and Turkish communities.

In addition to these pointers on refugee settlement administration, Agier (2011) makes a strong case against the central role given to humanitarian agencies in many camps today, stating that despite the undoubtedly good will of NGOs and other humanitarian organizations, their presence contribute to the perpetuation of a system of control rather than support. This is backed up by Boano (2011), who critique agencies for their lack of long-term follow-up on settlement growth and evolution, and by Franck (2018), who highlight how humanitarian agencies actively work to capitalize on human drama and suffering.

The spatial plan of the settlement needs to centre around refugees as social, economic, political and cultural agents. Basu and Asci (2020) have identified the urban as a habitat conducive for displaced people because it offers the infrastructure necessary for shelter and day to day living, an informal economy allowing varying livelihoods, the anonymity of living in largely populated cities providing a safeguard against deportation, and the freedom to live outside a camp environment affording a certain kind of flexibility. Although this is directed at existing urban spaces that become inhabited by displaced people, it can be translated into elements which need to be included in the formation of the spatial plan of a new urban refugee space:

- Appropriate housing opportunities
- The infrastructure necessary for day to day living
- A framework allowing varying livelihoods
- Community spaces for social support and safety

A refugee space does not exist in isolation from its surroundings, but needs to be adjusted to its spatial and cultural location (Ramadan, 2012). Albadra et al. (2018) accentuate the importance of adapting refugee spaces to the local climate, highlighting the importance of private semi-outdoor spaces in front of the shelters, both for thermal control during the seasons as well as to hinder insight into the shelter

OTHER
10%

SOMALIA
4%

SYRIA
10%

AFGHANISTAN
76%
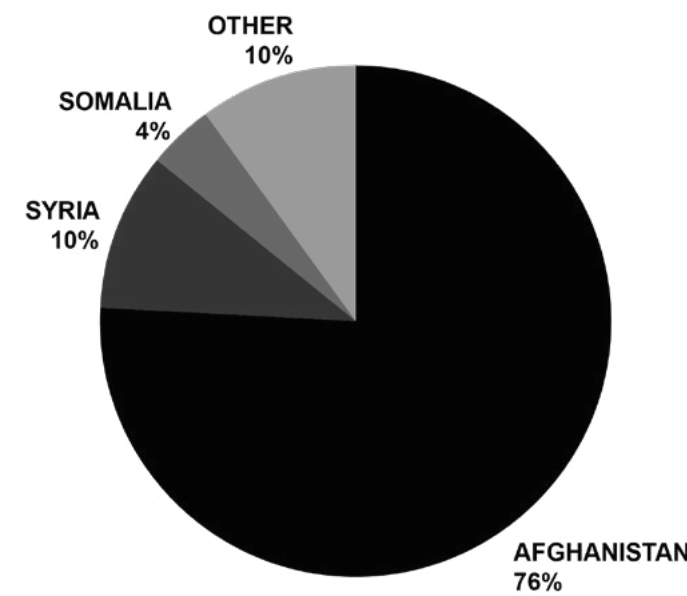
from passers-by.

The lack of urban infrastructure, such as road, electricity, water and sewage networks, makes communities vulnerable to collapse (Deshkar & Adane, 2016), and it is therefore no surprise that refugees actively modify and create infrastructure to suit their needs in camps today (Tomaszewski et al., 2016). Our knowledge on the benefit of infrastructure, beyond the technical, is in some cases widely researched, such as that of streetlights and perceived safety, that of green areas and well-being, and that of water networks and sanitation (Loewen et al., 1993; Russell et al., 2013; Rydin, 2012).

Despite how transit often is missing from urban refugee spaces (Basu & Asci, 2020), establishing pedestrian infrastructure can help maintain a sense of everyday life in addition to giving a variety of health benefits (Cavill et al., 2008). In Bogotá an extensive bicycle road network helped reduce crime by making the city accessible for the urban poor (Fettig, 2007). The public space that is the road was also used as social spaces for the neighbourhoods, effectively strengthening community bonds.

Bouaiti et al. (2016) found that Syrian refugees in the Za'atari camp had strong social motivations behind participating in camp affairs, stating that "They are hired as health leaders, security guards, involved in maintenance of order... They accept such responsibilities voluntarily and not for salaries but to feel that they are useful and earn the esteem and appreciation of others" (p. 120). The Sphere Project (2018) approves of engaging refugees in some kind of work within the camp, as long as the work is safe, non-compulsory and provide equal working opportunities. They emphasize that payment should be "an incentive for people to improve their own situation, rather than compensation for any work in the community" and be in line with whether the food assistance

programme use cash, vouchers or in-kind payment (Sphere Project, 2018). In addition to the social importance of work and participation, Posselt et al. (2018) found that education and training opportunities, as well as employment and economic activities are among the most important enablers for psychological well-being among refugees in transitory countries.

Basu and Asci (2020) argue that community spaces, including public spaces such as schools, libraries and parks, and everyday civic spaces such as grocery stores, flea markets and religious centres, provide nexus for social, cultural and political alliances that are especially important for displaced people. Establishing these spaces strengthens social support in the community, which Posselt et al. (2018) found to be the most important enabler of psychological well-being for displaced people. The social aspect is especially important for refugee children processing trauma (Lustig et al., 2004).

SUMMARY

There is consensus in critical literature on refugee settlement that the refugee camp, through its informal structures as well as its inhabitants' social and economic activities, is an urban space, and that new planning approaches should treat it as such (Agier, 2011; Dalal et al., 2018; Grbac, 2013; Sanyal, 2012). Refugees must be seen as agents capable of creating spaces to suit their social and political, as well as other, needs. In order to enable them to affect their physical environment, the administration of the settlement should include refugee participation. The host community should be included in the day to day running and maintenance of the camp, while NGOs and other humanitarian agencies should preferably only be given a supporting role.

The spatial plan of the settlement needs to centre

around refugees as social, economic, political and cultural agents, and facilitate for:

- Appropriate housing opportunities
- The infrastructure necessary for day to day living
- A framework allowing varying livelihoods
- Community spaces for social support and safety

HOW TO FACILITATE FOR A LIFE WITH DIGNITY FOR THE REFUGEES ON LESVOS?

THE RIGHT TO LIFE WITH DIGNITY

The right to life with dignity is found in international human rights treaties, international humanitarian law, human rights and refugee law, and has been implemented and explored in international humanitarian response standards (Sphere Project, 2018; Wicks, 2012). One such standard is Sphere, which has affected and been affected by the humanitarian response standards of several humanitarian agencies, such as the UNHCR and the German Red Cross (German Red Cross, 2016; UNHCR, 2015). The standard explores the physical space of the refugee camps and relates its understanding of life with dignity to this.

The principles Sphere build upon are expressed in their Humanitarian Charter, which in turn are used to identify the Minimum Standards articulated in the Sphere Handbook (Darcy, 2004). The handbook (2018) states that "The Humanitarian Charter expresses our shared conviction as humanitarian agencies that all people affected by disaster or conflict have a right to receive protection and assistance to ensure the basic conditions for life with dignity". Further, it summarises the rights of people affected by disaster or conflict as

- "the right to life with dignity;
- the right to receive humanitarian assistance; and
- the right to protection and security" (Sphere Project, 2018p. 29).

Though the right to life with dignity is at the core of the principles of international laws and humanitarian response standards, it is a concept that is hard to define (Mattson & Clark, 2011). Sphere (2018) writes that:

"The right to life with dignity is [...] the right to life, to an adequate standard of living and to freedom from torture or cruel, inhuman or degrading treatment or punishment. [...] Dignity entails more than physical well-being; it demands respect for the whole person, including the values and beliefs of individuals and affected communities, and respect for their human rights, including liberty, freedom of conscience and religious observance" (p. 29).

Prevailing values and beliefs can be identified through looking at the cultural conditions of a community (Bowen & Gleeson, 2019; Lu, 2006). We can thus assume that the concept of life with dignity is not a constant but can vary depending on the culture of the individual. It follows that one set of refugees can have a dignified life in a refugee camp, while another set of refugees in the same camp will not.

Thus, exploring the cultures of the refugees on the island of Lesvos will help to reveal what is experienced as a dignified life for the represented refugees. This can be done through looking at the cultural history of their countries of origin, and, since this project focuses on the urban refugee space, especially the history of the urban. Additionally, to ensure a life with dignity, it is important to respect the globally agreed upon human rights of every individual.

REFUGEES AND CULTURES ON LESVOS

There is a high influx of refugees to Lesvos, and the refugee situation on the island is today very reactive to disasters and conflicts especially in Africa and the Middle East (UNHCR, 2020a; UNHCR, 2020d). New crises can end up sending more people through Lesvos to seek refuge in Europe in the future. The US and Iran, suddenly on the brink of war, were close to doing this in early January of this year (Baker et al., 2020). Climate change threatens people's livelihoods especially in Africa and Asia and has created a new category of refugee that will likely grow in number in the near future – the climate refugee (Biermann & Boas, 2010). It is therefore likely that refugees of other backgrounds might be present on the island in the years to come, either because of war and crises or natural disasters. Although it is difficult to know where they might come from, they also have the right to a life with dignity in the refugee settlement.

The statistics of EuroRelief, seen in Figure 10, show that three quarters of the refugees in the camp today come from Afghanistan, while 10% come from Syria, 4% from Somalia and the rest from a variety of other countries. This means that the vast majority of the refugees come from the Middle East and the Arab world, as seen in Figure 11, and share much of the same cultural history and religious beliefs.

THE ARAB CONQUEST

The birthplaces of the first great civilizations in the world are located in the Middle East, and along the shores of the Mediterranean, the Red Sea and the Arabian Gulf (Finegan, 2018). The cities in this area are some of the first to be founded, and several of them are still habited today. The Arab Islamic conquest expanded over this area by mid-7th century AD, and much of the traces of Hellenistic, Roman and Byzantine cultures in the

cities was kept, though repurposed (Butzer, 2008). See Figure 12.

Ragette (2003) argues that the original Arabs managed to "Arabize" the region relatively quickly because of three factors:

1. The population they subjected to their rule were close in cultural roots to them
2. Their conquest was not destructive, but rather marked by tolerance towards different tribes and races
3. They limited their conquest to a zone of familiar physical conditions

It is because of this that Ragette (2003) argues that the Arabs managed to build on the existing civilizations of the area to create a vibrant culture of their own. It is important to underline that although the Arab conquest was largely an Islamic one, religion and politics was so intertwined that the conquest was equally political (Mikhail, 2014). This meant that many who submitted to Arab rule did not need to convert to Islam, and that Judaism, Christianity and many other faiths were tolerated (Mikhail, 2014). Distinctive from the new influences of the French, Russian and British colonialists, the Arab world enjoyed cohesive and similar traditions which derived from a largely shared faith and physical environment.

Butzer (2008) writes that "the spirit of egalitarianism did not tolerate ostentatious elite residences" (p. 85) and that secular power was so suspect that public displays of power could lead to a negative backlash. Still a power hierarchy was implemented with roots in the Islamic religion, where each city would have a governor, police and judge (UN-Habitat, 2012). The government of the state would only occasionally interfere in the relations of the city, as described by George Forester of the East India Company in his description of Afghanistan of 1783:
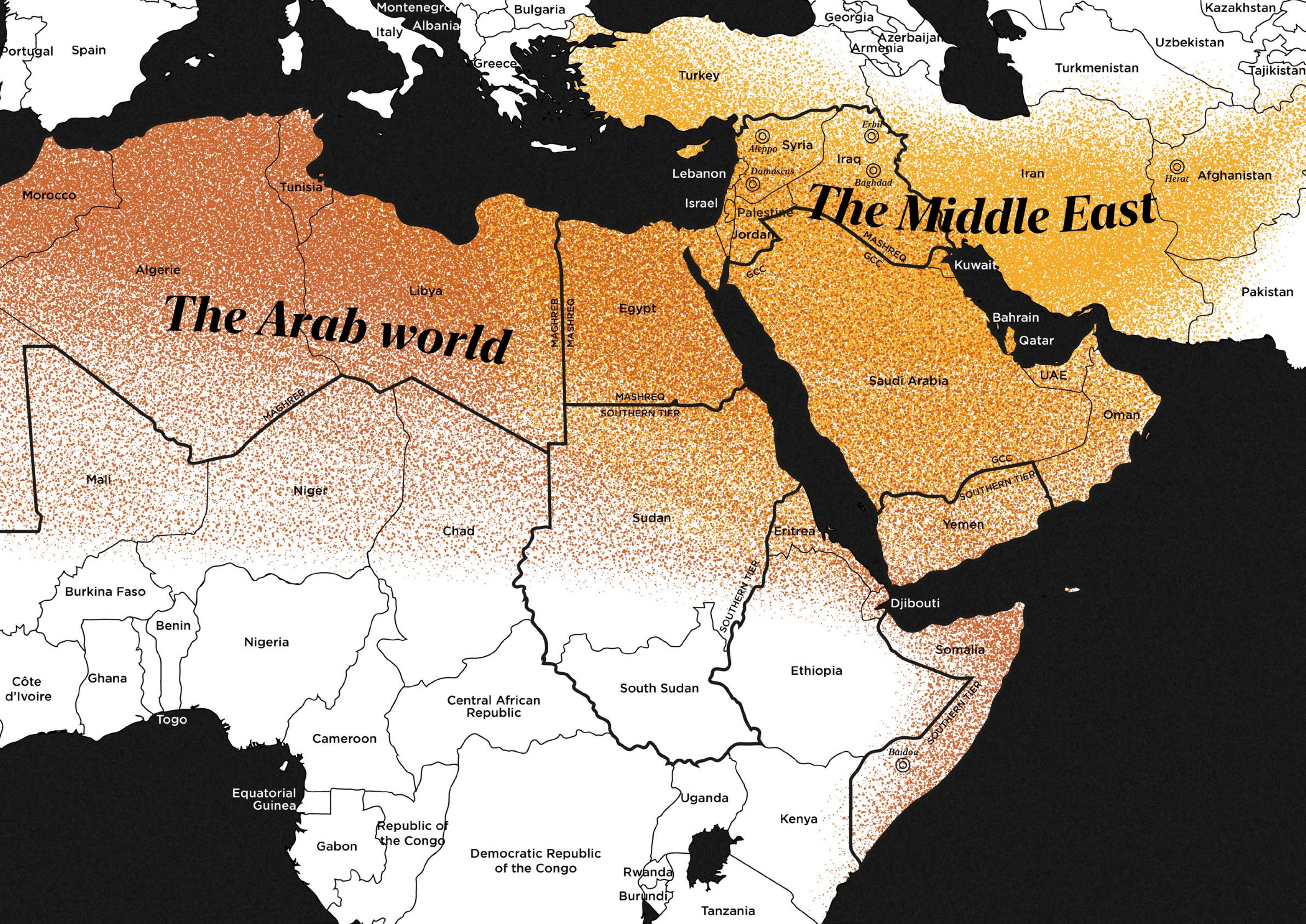
"(…) the different chieftains usually reside

The Arab world

The Middle East

in fortified villages, where they exercise an acknowledged, though moderate, sway over their vassals, and yield a careless obedience to the orders of the government. Rarely any appeal is made to the head of state, except in cases which may involve a common danger; when I have seen the authority of the Shah interposed with success."

The Arab cities excelled in providing public services for its residents, with *maristans* (hospitals), *hammams* (public baths), *sabils* (drinking fountains), *sabil-maktabs* (an elementary school with a drinking fountain), *dar al-ilm* (public libraries), *suqs* (markets), *khans* (prominent inns for commercial travellers) and *wakalas* (urban caravanserais) (Butzer, 2008; UN-Habitat, 2012). Though much of the cultural heritage was kept by the Arabs, certain changes had to be made to fit the urban structures into that of the dominating Muslim faith. Butzer (2008) explains how the Byzantine bathhouses were used for personal hygiene instead of social intercourse, how commerce became a meritorious enterprise with *suqs* both inside and on the outskirts of the cities, and how family life was focused in the sequestered courtyard. Mosques and schools became important social nodes, surrounded by gardens and ablution facilities.

Following traditions from before the conquest, the people of the Arab world lived in one of three ways: as peasants, as Bedouins (nomads) or as urban residents of the city (Hourani, 2013). While the Bedouin roamed the land with their livestock, the settled peasant would work for a landlord who usually resided in the city, sometimes owning the rights to both land and water (Lambton, 1953). The Bedouins would from time to time delight in robbing villages and cities, inhabited by merchants, craftsmen and landlords, of their relative wealth, and the urban dweller would thus live under constant threat of such attacks (Hourani, 2013; Ragette, 2003). The shelter of the independent urban dweller would therefore have to be fortified,

and considerations of security prioritized.

Ragette (2003) explains much of the lifestyle and urban structures of the region on the nomadic input that the Bedouin brought. He argues that survival in the harsh desert is only possible through strong social bonds, and that the necessity of protecting individuals outside of these bonds is root to the tradition of hospitality towards strangers. The hierarchical order would introduce elaborate customs and a severe code of honour. This code of honour was especially prominent in Afghanistan, where, when breached, it would lead to punishment in the form of both torture and death (Ewans, 2002).

Spatially accommodating for this hierarchy would be easy in the spacious desert, argues Ragette (2003), while the density of the city would require a more complex hierarchy of spaces, hence the need for doors, passages and screens. Esfanjary Kenari (2015) explains the gradual formation of a Persian city in modern-day Iran, as it moves from farming and garden plots, to subdivision of the plots, to the formation of private space formed through the use of walls, passages and doors as the number of inhabitants increase.

Islamic segregation of public and private room created a primary concern for the needs of the household and its neighbours rather than for citywide organization, which in turn resulted in an irregular street plan (Monroe & Schloen, 2002). The nongeometric urban agglomeration that ensued reflected local impulses, constraints and needs (Butzer, 2008). This urban labyrinth of public and private space is illustrated in Figure 13. The conservative archetype was mostly found in North Africa, while Turkish Islam was more flexible in regard to the segregation of public and private space (Butzer, 2008).
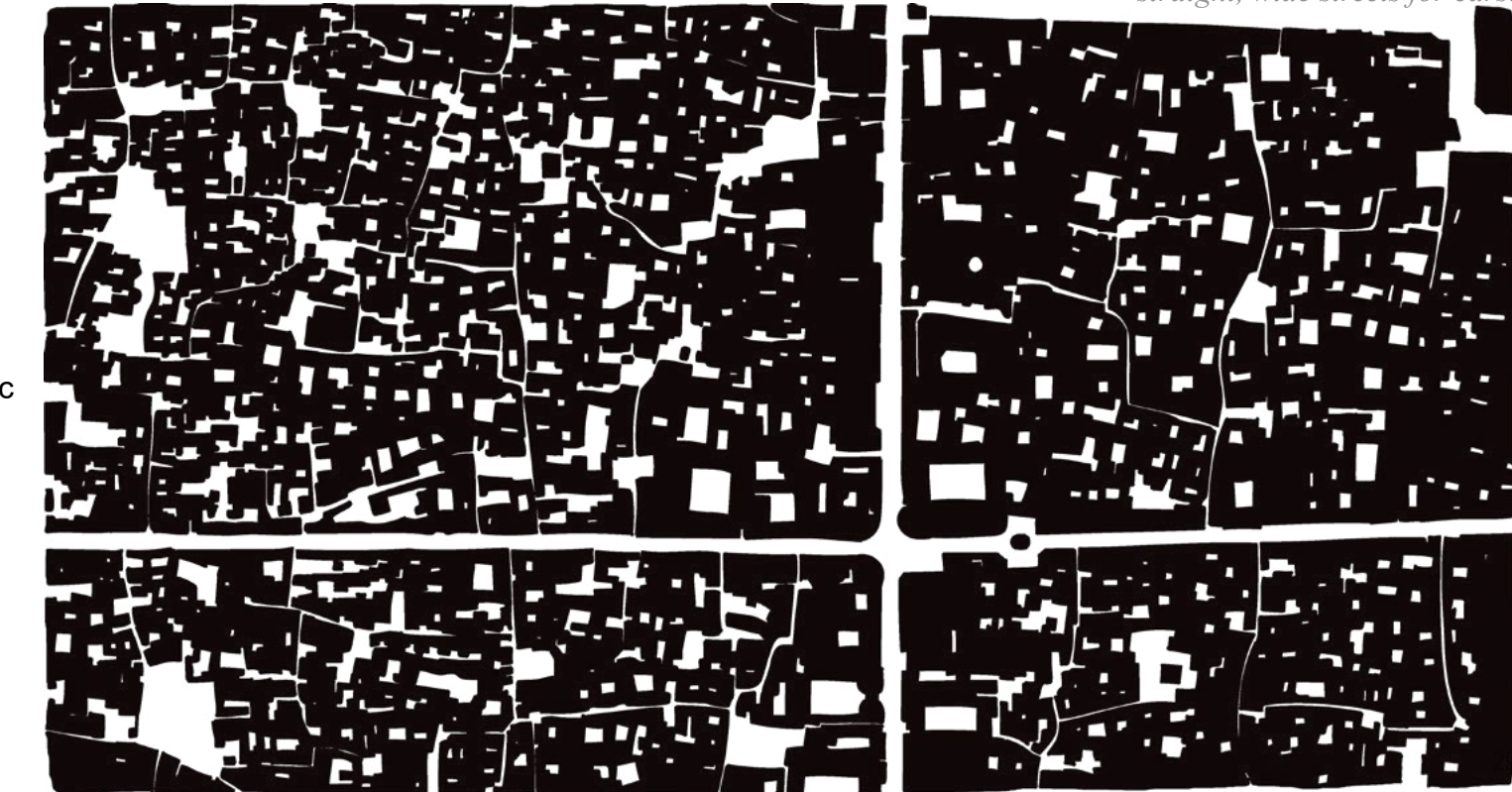
Figure 14. Damascus, Syria. Population density: 23 000/km².
The capital of Syria is one of the oldest continuously settled cities of the world, and centuries and millennia of urban planning has influenced its structure. To the right is the Old City, while the modern plan dominates the left.

Figure 16. Baghdad, Iraq. Population density: 35 000/km².
Though reformed in the modern eye with straight roads easy to navigate by car, the capital of Iraq has kept the distinction of private and public space by giving the houses their own gardens and allowing each house to be adjusted as its residents please.

Figure 15. Aleppo, Syria. Population density: 10 000/km².
Though the city has been marked by the destruction of several wars, it has been able to rebuild itself and is today dominated by high-rise blocks and a rigid plan.

Figure 17. Baidoa, Somalia. Population density: 11 500/km².
Even in cities the rural aspect is dominant. Private space is prioritized over public space by each household fencing in their property and using their garden as an active living area.

WESTERN INFLUENCE

The consequences of colonialism and World War I and II have made a lasting imprint on the modern history of the region (Pappé, 2014). Battles between Western superpowers, such as Britain, the US and Russia, were fought in territories in the Arab world and the Middle East in the 20th century, leaving behind several states with little to no infrastructure or power hierarchy struggling to keep up with the turn of the world (Pappé, 2014).

In turn, both British and Soviet forces tried and failed to colonize proud and independent Afghanistan, where the latter's disastrous encounter with the Afghani in the 1980s was a significant element in the dissolution of the Soviet Union itself (Ewans, 2002). The broken country that was left behind became an effective breeding ground for several militant religious groups with links to its tribal past and a strong code of honour, such as Taliban, practicing terrorism on both its neighbours and the international world (Ewans, 2002).

The fight for rights to natural resources, such as oil and precious metal, has also been significant for conflict-making in the region, and was an important factor leading up to the collapse of the Somali government in 1991 (Njoku, 2013). The lack of state institutions and frequent attacks of several militant religious groups on the local area, such as the al-Shabaab, have disrupted any significant urban development for over 30 years, leaving the population to reside in settlements of mainly rural character (Farah, 2007; Njoku, 2013).

However, not all countries of the region would experience the fall of state institutions and the rise of militant groups in the 20th century. In her book *The New Old Damascus* Salamandra (2004) briefly explain how wealthy nationals started replacing foreign elites in the capital of Syria, establishing the first few private Syrian-owned industries in the early 20th century. These rich families sought a modernisation of the urban, and so moved out of the traditional Arab houses of the inner city and into French-style villas on the outskirts of Damascus. As more people followed, the crowded Arab living quarters "with their trees shedding leaves, and the stairs the women had to climb up and down" (Salamandra, 2004 p. 26) became outdated, lower-class areas. Janet Abu-Lughod identified a similar process of socioeconomic differentiation resulting in a decline of the "traditional urban" in Cairo (Abu-Lughod, 1971). Sami Zubaida argues that this process can be identified in all Middle Eastern cities (Zubaida, 1989). The meeting between the new and the old urban plans in Damascus is shown in Figure 14.

During the post-World War II period the population of Damascus quadrupled, reaching over 1.3 million inhabitants in the early 1980s, and high-rise blocks were rapidly and cheaply replacing the older two-storey buildings in order to house the newcomers (Salamandra, 2004). This is also seen in other Syrian cities, such as Aleppo in Figure 15. The end of the 20th and start of the 21st century saw a nostalgia returning for the city's Arab roots, with many revaluing the Old City's unique cultural and architectural heritage (Salamandra, 2004).

MODERN CONFLICT AND LIVING CONDITIONS

In 2012 the UN published the first of two State of Arab Cities report, which looked into the urbanization challenges and opportunities of the region (UN-Habitat, 2012). It showed that the region is one of the most urbanized in the world, with 56% of its residents living in cities, and that economic development, migration to oil-rich countries, drought and conflict are major drivers behind the urbanization (UN-Habitat, 2012). The report divides the region into four sub-regions: the Maghreb, the Mashreq, the Gulf Cooperation Council (GCC), and the Southern Tier, as shown in Figure 11.

The report continues to explain how the lack of affordable and decent housing is a major problem throughout the region, and in countries that have experienced continued conflict, high rates of poverty and pervasive political instability, this has resulted in lasting informal settlements. In countries like Sudan, Somalia and Iraq these settlements comprise 50-95% of total urbanization (UN-Habitat, 2012). Syria, a country which up until recently had experienced little political turbulence, has an informal settlement prevalence of 0-15% (UN-Habitat, 2012).

The Mashreq countries is home to 50% of the world's refugees, placing a big pressure on the cities of the sub-region and establishing several areas of informal settlements. These settlements tend to offer decent housing conditions, though they lack proper sanitation (UN-Habitat, 2012).

Since its origin in Iraq in 2013, for which the US invasion of the country ten years prior, as well as the following dismantling of state institutions, was a significant element, the jihadist terrorist group ISIS has affected quality of life in the Levant (Gerges, 2016). A section of the capital of Iraq, Baghdad, can be seen in Figure 16. The Syrian civil war of 2011 made it possible for the group at its peak to expand its territory to cover parts of both Iraq and Syria (Gerges, 2016). Though there is little information to be found on the subject, the bombings of Syria have permanently scarred its old cities.

The Southern Tier countries have been unable to secure basic services for most of their citizens because of prolonged periods of conflict. Except for Djibouti, these countries are predominantly rural but are now experiencing the highest urbanization rates of the region (UN-Habitat et al., 2020).

The State of Arab Cities report concludes that climate change will increase the threat of conflict over oil and water rights on the Horn of Africa in the future, potentially increasing attacks from al-Shabaab on the area (UN-Habitat, 2012). The Somalis have fallen back to rely on their local communities for security against attacks, and many are involved with farming even in towns and cities, as shown in Figure 17 (Farah, 2007; Orsini et al., 2013).

In Afghanistan, another country of prolonged conflict, the situation is similar. With state institutions and infrastructure broken down, many Afghanis have reinforced their old tribal and community structures (Ewans, 2002). Though many of the cities in Afghanistan are millennia older than those of Somalia, and the urban structures bear imprint of that, the appreciation of private land and the opportunity to live off what can be grown by oneself is strong (Ewans, 2002; Orsini et al., 2013; Safi et al., 2011).

SUMMARY

The right to life with dignity for refugees is stated in international law and is the root for the international humanitarian standards of the world. This text argues that what is perceived as life with dignity will vary from one cultural group to another, and that identifying each cultures' standard of living through looking at their cultural history can help reveal this perception.

The vast majority of the refugees on Lesvos come from the Middle East and the Arab world of the world and share much of the same cultural history. Their living situation has been characterized by strong social bonds leading to a focus on private space, urban rooms divided by walls and passages, and urban elements that service the public, such as *maristans* (hospitals), *hammams* (public baths), *sabils* (drinking fountains), *sabil-maktabs* (an elementary school with a drinking fountain), *dar al-ilm* (public libraries), *suqs*
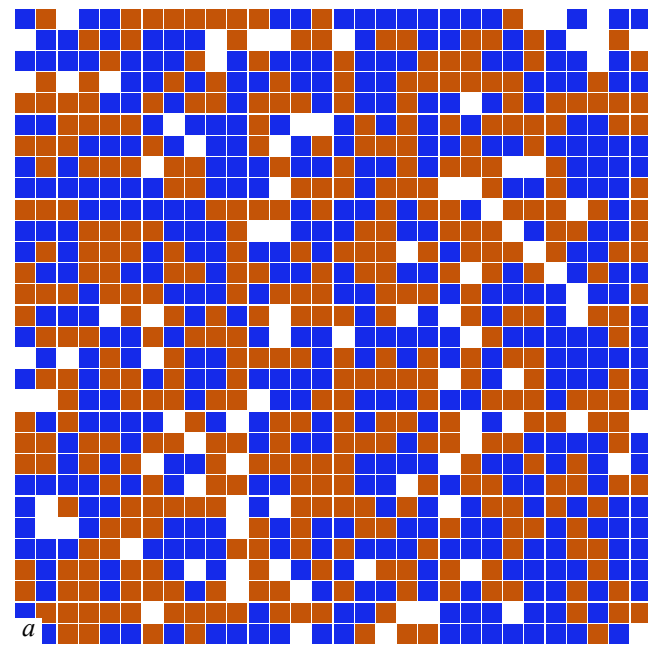
Figure 18. The Schelling model shows how the allocation of groups of people, be they ethnic, cultural, religious or other, might look depending on how tolerant the groups are of each other.
a - The members of the two groups, visualized as blue and orange squares, are randomly allocated across a board. 10% of the squares are vacant.
b - The members are allocated according to their tolerance, which here is set to 50%. This means that the members tolerate being in a neighbourhood where the other group is equally represented to their own. The model shows that this leads to clear segregation between the two.
c - The members are allocated according to a tolerance of 25%, where they will allow their own group to be the minority of the neighbourhood. The two groups are less segregated.
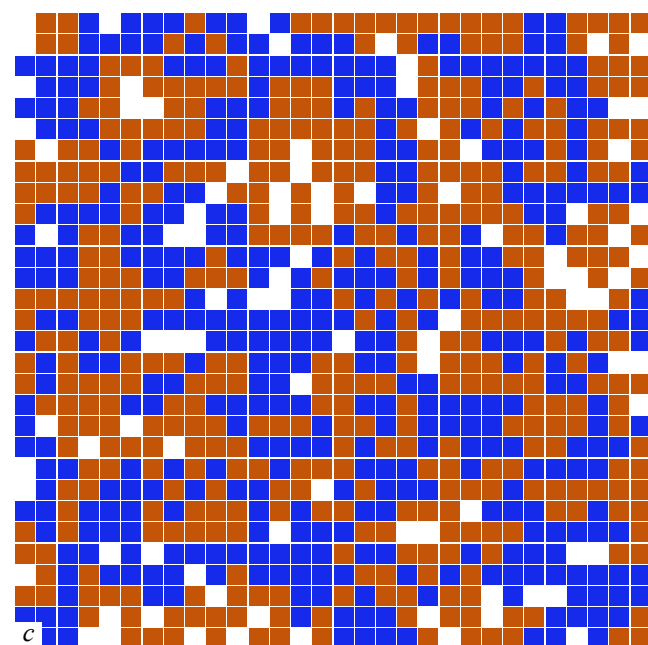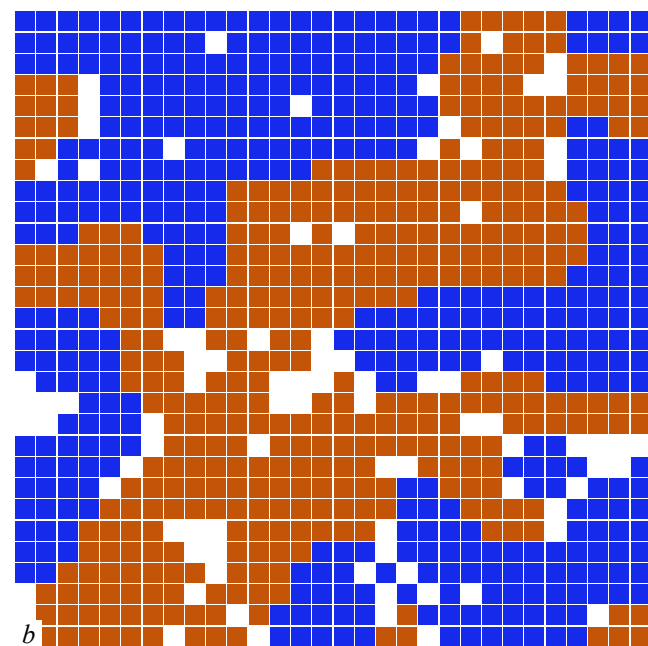
(markets), *khans* (prominent inns for commercial travellers) and *wakalas* (urban caravanserais). In addition to the markets, open public space can typically be found around religious centres and mosques. Sequestered private rooms are valuable for family life and as community spaces.

Areas of prevailing conflict, such as Afghanistan and Somalia, are characteristically rural and with a strong focus on private space. Each household typically has a garden which is used to grow and prepare food. Areas without prevailing conflict, or where conflict has only happened recently, such as Syria and Egypt, have over the last few decades sought back to the traditional Arab urban after spending the majority of the last century seeking modernization through Western building practices. The elements of these urban landscapes need to be combined in an appropriate way to create a living situation for the refugees on the island that upholds their right to life with dignity, while keeping in mind that other refugees and their cultures might arrive at the island in the years to come.

HOW TO FACILITATE FOR A RAPID SUCCESSION OF PEOPLE IN A PERMANENT URBAN STRUCTURE?

SPATIAL ALLOCATION OF GROUPS AND THE SCHELLING MODEL

The challenge of having people from many different cultural backgrounds live in the same place have been highlighted in the last century, as major conflicts have led people to flee their country of origin. The spatial allocation of groups of different cultural and ethnic backgrounds in the urban landscape can cause social frictions and uprisings if not done right. If the groups are able to function harmoniously, peaceful living and economic development is made possible for all parts (Alba

& Nee, 2003). This planning of allocation must be done with care in order to avoid frictions of which are seen in the camp today (see Attachment 1).

Following the principle of self-organization and self-determination of refugees, it is natural to suggest self-settlement of the refugees in the urban space instead of the paternalistic planning where each person receives a shelter immediately upon arrival which is practiced today (Al-Nassir, 2016; Dalal et al., 2018). A model proposed by Schelling (1971) tells us that this self-settlement will lead to a level of segregation, but it is unlikely to leave individuals unhappy with their living situation. The Schelling model shows that segregation can emerge even when individuals are willing to live in neighbourhoods where their group is in the minority. In its intriguing simplicity the model explains why many cities are segregated along ethnic and racial lines.

As shown in Figure 18, the model demands a certain amount of available free space to maintain a level of dynamism. As people in the refugee settlement are granted asylum and relocated to the mainland, new refugees will arrive to Lesvos and likely create new settlement patterns which will lead to the exchange of a neighbourhood from one group to another. For the model to function the way it is intended, the decision of individual allocation needs to be a precise and conscious choice. This means that any new refugees will need to know about existing settlement structures before deciding on where they will live.

Instead of dividing its camp inhabitants by culture or ethnicity, the German Red Cross spatially allocates them by the length of their stay (German Red Cross, 2016). Refugees who stay in the camp for several months are sheltered in areas that provide more private space than refugees who only stay in the camp for a few weeks or days. The refugees with the shortest stays are housed

at sites providing 20 m² including facilities. Upon arrival all refugees are housed this way, before either having their asylum application granted and being relocated to a German town or city, or being resettled at a new site within the camp providing long-term shelter. This method of providing short-term shelter before deciding on long-term shelter location can be adopted for use on Lesvos.

SPACE FOR COMMUNITY AND CULTURAL CONTACT

As the Schelling model explains that there is likely to be a level of segregation even when individuals are willing to live as the minority in an area, there will likely be a segregation between the groups of refugees on Lesvos. However, integration is the most widely approved method of acculturation of refugees today, as it encourages interaction with the dominant culture while at the same time maintaining one's own cultural identity, see Figure 19 (Alba & Nee, 2003; Berry, 1998). Total segregation of cultures in the refugee settlement is thus not desirable, as it promotes separation and does not prepare them for resettlement in a third country (Black & Koser, 1999). In the case of repatriation to the country of origin, separation does not promote a tolerant view on other cultural groups, which can lead to further conflict in the future (Harris, 2007).

Amin (2002) states that "coming to terms with difference is a matter of everyday practices and strategies of cultural contact and exchange with others who are different from us" (p. 976), and that this contact should be implemented in public places such as schools, youth leisure spaces, communal gardens, urban murals, theatres and initiatives inculcating civic duty. The mixed cultural contact should be promoted not just as copresence, but as a habit of practice.

However, spaces for community bonding for refugees within a group cannot be overlooked. Chase and Sapkota (2017) found that family, friends and neighbours are the first tier of support for refugees in response to distress, and that these assist in linking to support on a broader level, such as religious leaders, traditional healers and formal health services. Refugees should thus have community spaces facilitating for meetings with family, friends and neighbours too.

SUMMARY

Spatially allocating people of different backgrounds in the refugee settlement can prove a challenge if done wrong, and an asset if done right. In the spirit of self-organization of refugees, self-settlement is the preferred method of allocation of the multitude of cultural groups represented on Lesvos. The Schelling model tells us that this will lead to a level of segregation between the groups yet will likely also lead to a situation where individuals are satisfied with their living situation.

However, total segregation is not preferable. Assuring that there are spaces for mixed cultural contact in public spaces on city scale, while allowing for community spaces on neighbourhood scale, will allow the refugees to establish and strengthen social bonds within the group as well as outside of the group.

Panel 4. The family is crossing the Stait of Mytilene.

Figure 19. Berry's theory of acculturation shows how integration seeks to maintain the cultural heritage of a minority while at the same time encouraging interaction with the dominant culture. Adapted from Berry, 1996.
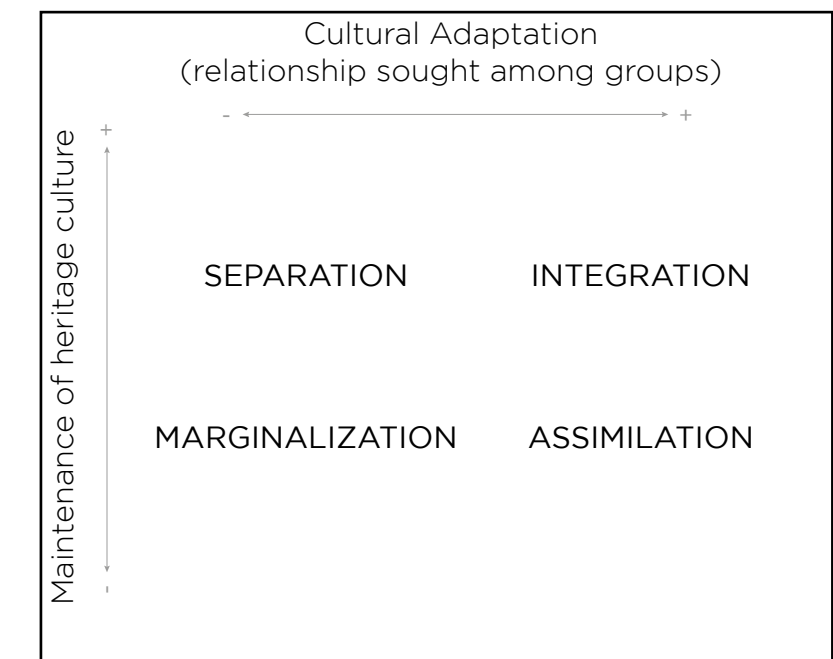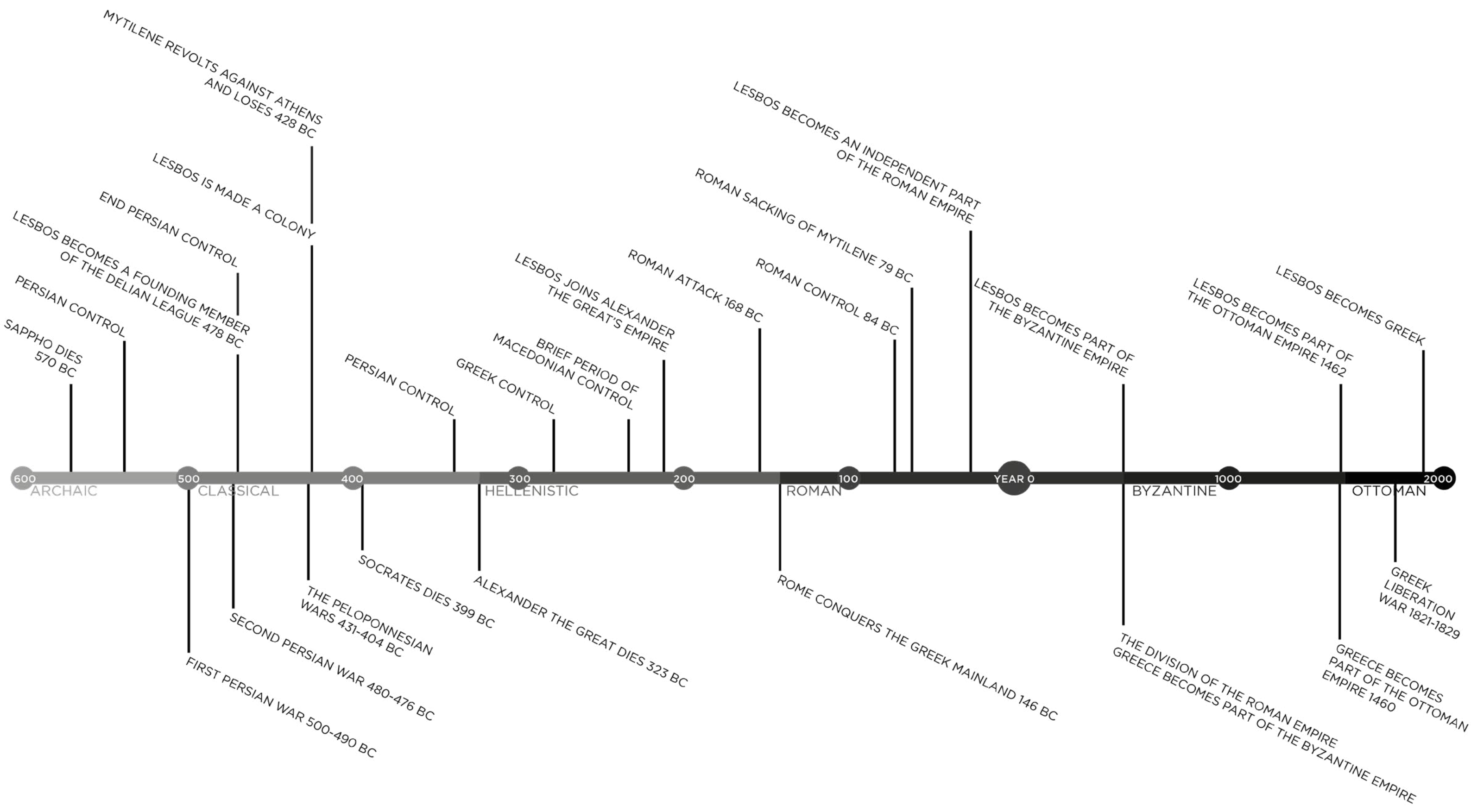
Figure 20. Timeline of Lesvos' history (Cartwright, 2019; The Editors of Encyclopaedia Britannica, 2020; GREEKNET, s.a.). Events related to the areas outside of the island are marked under the line.

Figure 21. The terrain on Lesvos (Lesvos, 2020).
a - Elevation. High altitudes are light.
b - Slopes. Steep areas are light.

Figure 22. Map of Lesvos in relation to its surrounding landscape. (Next spread.)
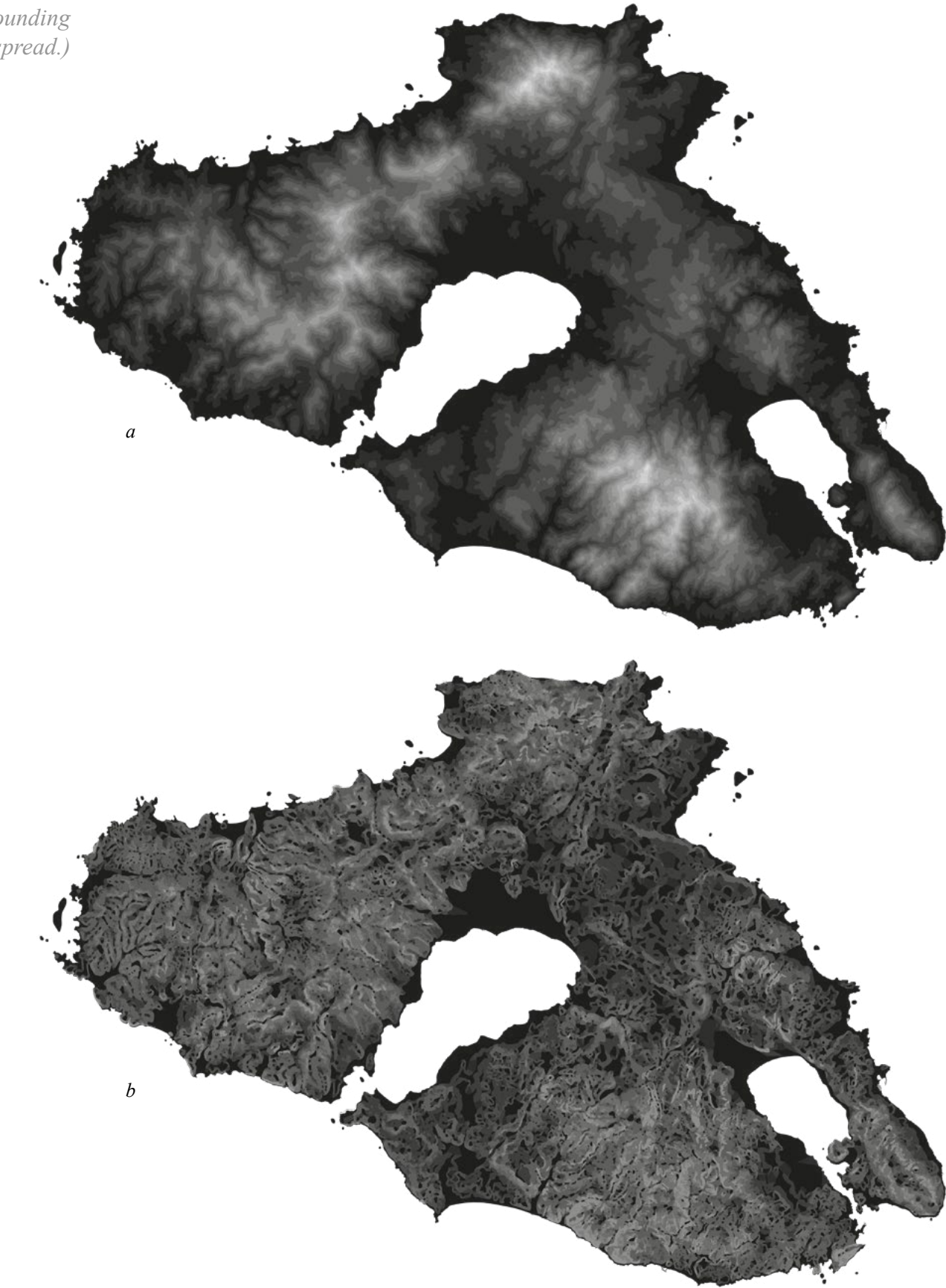
THE ISLAND AND THE CAMP

LESVOS' HISTORY

Being an island in the Aegean Sea situated close to the Turkish coast, Lesvos has cultural ties to both modern-day Greece and Turkey, see Figure 20. Periods of migration have made it a melting-pot for several cultures, and in the Bronze-age the mix of Hellenistic, Anatolian, and indigenous practices made up its heritage (Cartwright, 2019). Fertile soil and a rich climate have made it ideal for farming grapes and olives, and in its heyday, when export of wine, olives, and olive oil made the island rich, the polis (city-state) of Mytilene was as big as Athens (Cartwright, 2019). During this period, the naval force of the island allowed it to control areas in modern-day Turkey, though this time of riches did not last (GREEKNET, s.a.).

The different polis on the island would at times fight each other, and periodically the island would be invaded and conquered by outsiders. In the last hundred years BC, the island was periodically controlled by the Persians, the polis of Athens, Macedonian tyrants, the Greeks and the Romans, in addition to periods of independence (The Editors of Encyclopaedia Britannica, 2020). In the last 2000 years Lesvos hasn't changed hands as often. After being under Roman, later Byzantine rule, Lesvos was conquered by the Ottomans, before finally becoming a part of the Kingdom of Greece after the Balkan Wars in 1913 (Cartwright, 2019). Traces of all the different rules can be found on the island, such as for instance the ancient Greek theatre built around 100 BC, the roman aqueduct from around 200 BC, the Valide Djami, a Turkish mosque built 1615, and the Ottoman Charsi hammam built during the first quarter of the 19th century (Cartwright, 2019; Loupou, s.a.-a; Loupou, s.a.-b).

After the signing of the Treaty of Lausanne after WWI, there was a population exchange between Greece and Turkey where approximately 500 000 Muslims with Turkish background moved from Greece to Turkey, and an estimated 1.5 million Orthodox Christians with Greek background moved from Turkey to Greece (Erden, 2004; *Treaty of Peace with Turkey Signed at Lausanne*, 1923). This enormous upheaval of people also affected Lesvos, as the island received several thousand of these refugees (Kizos, 2020). Many of them were settled in a new district of the city of Mytilene, built for and by the new citizens (Kizos, 2020).

THE ISLAND TODAY

In addition to its cultural roots to Turkey and Greece, Lesvos is likewise tied to both Anatolian and Aegean geology by being situated on the crossing of their two tectonic plates. The eastern side of the island consist mainly of metamorphic rock providing high groundwater, while the west is made up of younger volcanic rock and lower ground water, see Figure 23. This has created the rocky terrain, see Figure 21, and is reflected in vegetation types of the island, shown in Figure 24. While the west is a sparse, windy savannah, the east is green and fertile and has been shaped by millennia of agriculture, notably olive production which has made lasting imprints in the form of stone terraces and ancient olive trees in the landscape (Kizos, 2020). This has affected the population dispersal of the island, providing the east with a higher population density.

The biggest city on the island is Mytilene, situated on the east coast barely 20 km from the Turkish border as shown in Figure 22. With its approximately 30 000 inhabitants it stands out from the other villages on the island, who typically have a population of 3000 or less (World Population Review staff, s.a.). Elements of the island's multicultural urban history shape the distinctly Mediterranean features of these urban centres, see Figure 25.

The buildings are typically villas or similarly

MAP
of
LESVOS
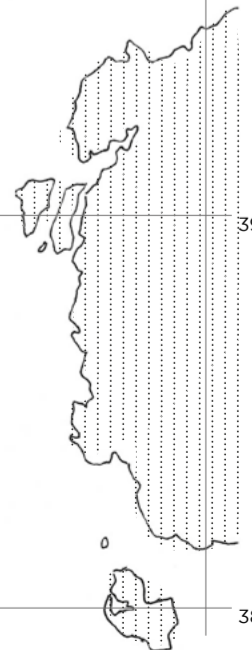
Turkey

The Aegean Sea

The Mytilene Strait

Turkey

Lesvos

Lepetymnos Mountain Range

Olympus Mountain Range

Kólpos Kallonis

Kólpos Geras

Mithymna
Μήθυμνα

Petra
Πέτρα

Mantamados
Μανταμάδος

Mt. Profitis Ilias

Agia Paraskevi
Αγία Παρασκευή

Kalloni
Καλλονή

Sigri
Σίγρι

Eresos
Ερεσός

Skala Eresou
Σκάλα Ερεσού

Polichnitos
Πολίχνιτος

Agiasos
Αγιάσος

Mt. Olympus 968

Panagiouda
Παναγιούδα

Mytilene
Μυτιλήνη

Plomari
Πλωμάρι

Ayvalik
Ayvalık

710

935

N

20 000 m
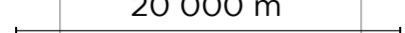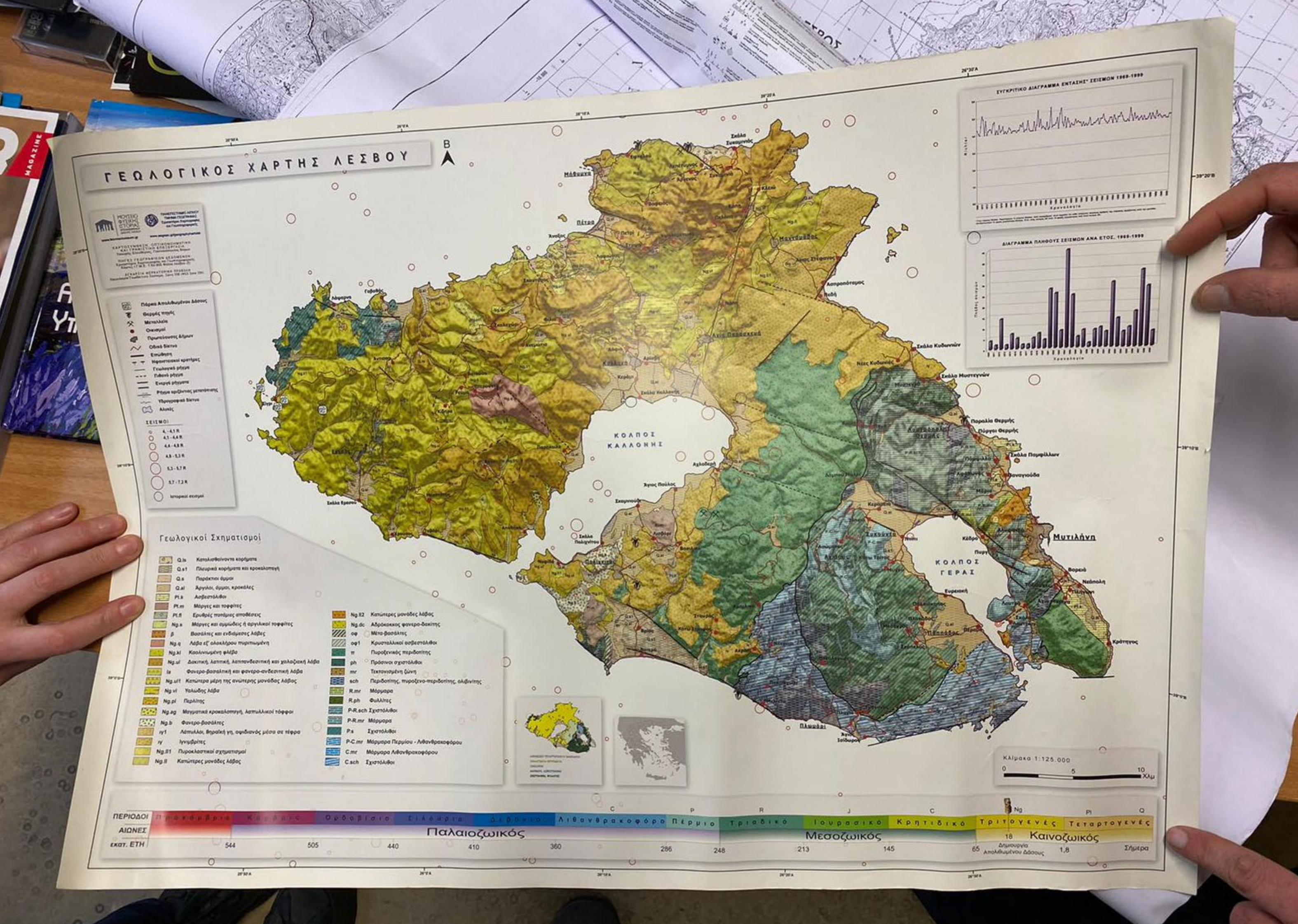
Figure 23. The geology of Lesvos. (Jörg Rekittke, 2020).

Labels on photograph:
Olive tree *Olea europaea*
Shrubs *Quercus ilex* / *Pistachio mutica* / *Juniperus excelsa*
Pine *Pinus brutia*
Pine *Pinus nigra*

Figure 24. The fertile east on Lesvos is dominated by olive groves that have been cultivated for millennia.
a - In recent years several olive groves have become overgrown because the price of olives has dropped and it is therefore no longer a viable source of income. There are still many old olive trees and stone terraces to be found in these areas.
b - The olive grove landscape is characterized by stone terraces built to make the land more productive.
c - Pine forests are also typical for certain areas of the east coast. This photo shows a forest near Mytilene.
d - Private gardens are often adorned with orange trees.

Figure 25. The centre of Mytilene.

Figure 26. Building heights in Mytilene (Bathrellos et al., 2008).

Two storey buildings

Multiple storey buildings

detached houses, except for the dense urban centres which are dominated by row houses. In Mytilene these follow the old, narrow shopping streets, with businesses on the first floor and living quarters on the low-ceilinged second floor. Other buildings can have upwards of four floors, see Figure 26.

By looking at the city plan of Mytilene in Figure 26, it becomes evident that the street network has been adjusted and readjusted by millennia of urban use, creating a complex network of narrow streets. Except for the few roads which have been adjusted for motorized transport, the urban centre is best navigated by bike or moped. In summer, the main streets are cooled down with awnings that can span from one wall to the next, as shown in Figure 25. Open urban spaces are found in the form of schoolyards, playgrounds, parks and marketplaces. Trees are occasionally found in intersections of the street, while lush gardens with fruit trees and flowers peak through the fences from the front porches.

REFUGEES AND THE ISLAND

Crossing the Mediterranean can be dangerous, and it is therefore normal to prefer one of the shortest sea routes crossing from Morocco to Spain, from Tunisia to Italy or from Turkey to Greece, routes which today are dubbed the Western, Central, and Eastern Mediterranean migration routes. Because of its proximity to the Turkish coast, many who travel the Eastern Mediterranean route decide to journey through Lesvos in order to reach the European mainland, as shown in Figure 28.

Figure 27 briefly explains the events that have occurred in Afghanistan, Syria and Somalia – the top represented countries in Moria – during the last 10 years leading to its citizen fleeing their countries and seeking asylum in Europe. The Arab spring of 2011 was a trigger point for many of these

events, as the revolution did not provide many permanent solutions to the frustrations of the public and offered few long-term changes (Leraand, 2019). It also provoked militant action from several stubborn governments such as that of the Syrian regime, which sparked the Syrian civil war in 2012 (Heydemann, 2013).

This civil war ended up creating the largest humanitarian crisis of our time (Batalla Adam, 2017). With conflict targeting civilians both within the country and in the neighbouring countries, the Syrians at the beginning of 2015 turned towards Europe in search of temporary refuge until they could return home again (Berti, 2015). These were added to the smaller number of refugees from other contested areas, such as Afghanistan, Iraq, the DRC and Somalia, who had been crossing the border to Europe for several years already (Heisbourg, 2015). Although the Syrians comprised the bulk of the mass by the end of the year, almost one in five refugees were Afghan and the number of Iraqi refugees were growing (Heisbourg, 2015).

After coining the term "refugee crisis" upon realizing that housing the refugees would be problematic (Greussing & Boomgaarden, 2017), the EU realized it would need to create a system for registering the increasing flow of refugees crossing the European border, and established hotspots at the most commonly used border crossings (European Commission, 2015). One of the first refugee camps to get this status was the Moria camp on Lesvos. Here the refugees are registered and fingerprinted, before sending in an asylum application and waiting for it to be processed (European Commission, 2015). The hotspot approach creates a funnel effect, since all displaced people passing through the area must arrive at the camp before being able to move on. Though there are other camps on Lesvos, all refugees must first register in Moria before being able to apply to move to another camp.
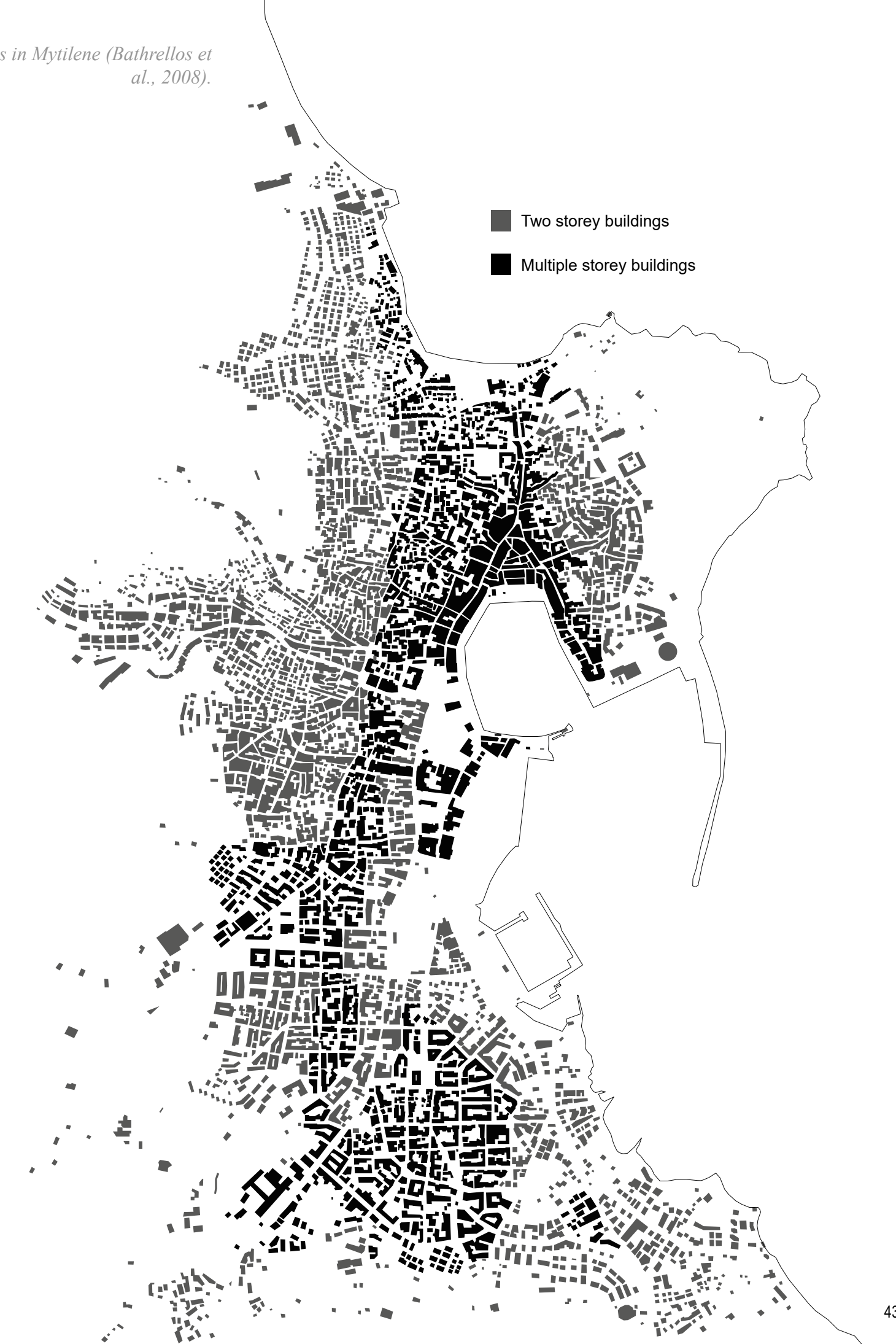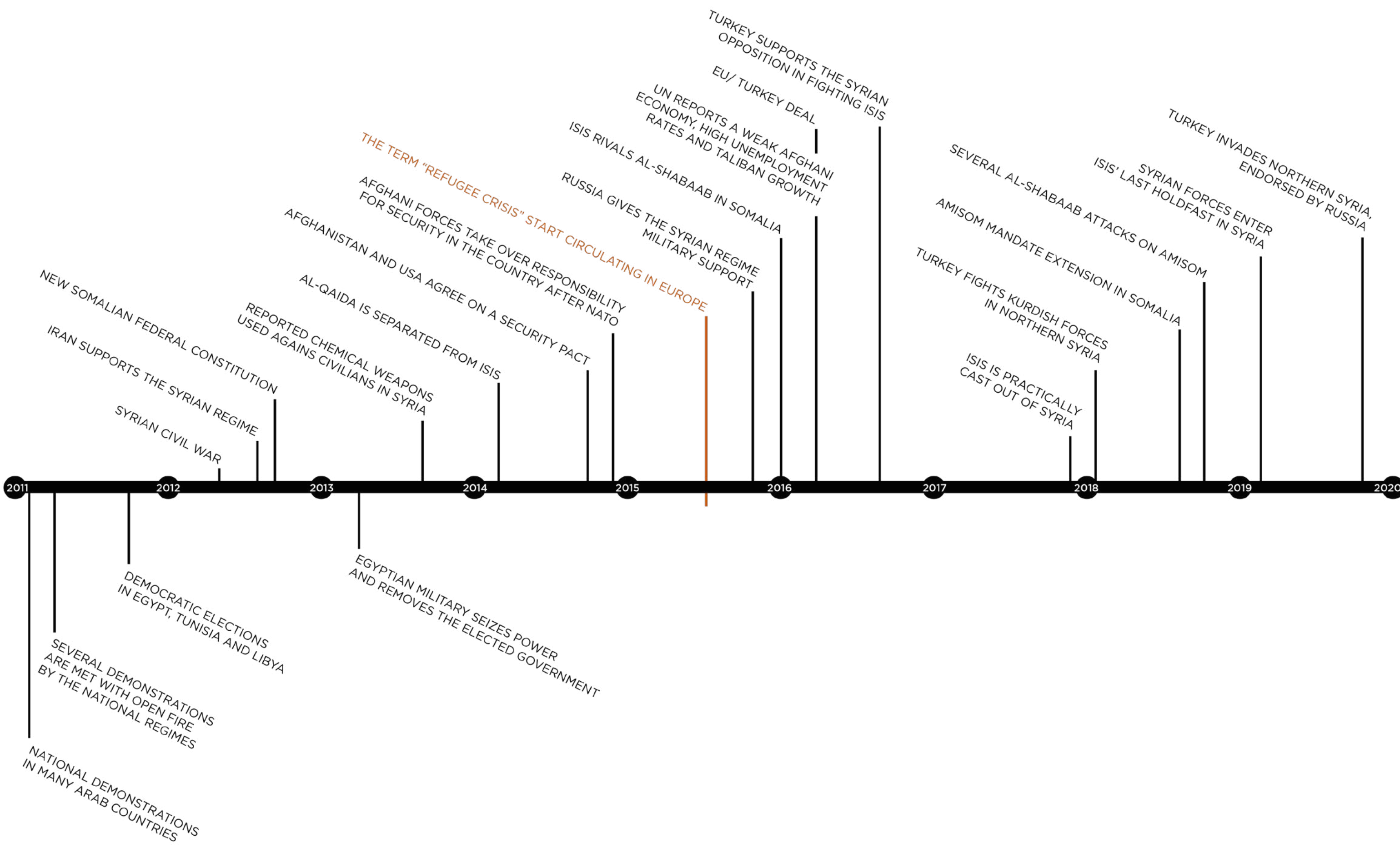
Figure 27. A brief and simplified overview of events that have led people from Afghanistan, Syria and Somalia to flee over the last 10 years (Heydemann, 2013; Rygiel et al., 2016; Johannessen & Stenersen, 2019; Leerand, 2019; Leraand, 2019b; Leraand, 2019c). Events relating to the Arab spring are marked under the line.

Timeline (2011–2020), events above the line:

- NEW SOMALIAN FEDERAL CONSTITUTION
- IRAN SUPPORTS THE SYRIAN REGIME
- AFGHANISTAN AND USA AGREE ON A SECURITY PACT
- AL-QAIDA IS SEPARATED FROM ISIS
- AFGHANI FORCES TAKE OVER RESPONSIBILITY FOR SECURITY IN THE COUNTRY AFTER NATO
- RUSSIA GIVES THE SYRIAN REGIME MILITARY SUPPORT
- ISIS RIVALS AL-SHABAAB IN SOMALIA
- UN REPORTS A WEAK AFGHANI ECONOMY, HIGH UNEMPLOYMENT RATES AND TALIBAN GROWTH
- EU/ TURKEY DEAL
- TURKEY SUPPORTS THE SYRIAN OPPOSITION IN FIGHTING ISIS
- SEVERAL AL-SHABAAB ATTACKS ON AMISOM
- AMISOM MANDATE EXTENSION IN SOMALIA
- TURKEY FIGHTS KURDISH FORCES IN NORTHERN SYRIA
- ISIS' LAST HOLDFAST IN SYRIA
- SYRIAN FORCES ENTER
- TURKEY INVADES NORTHERN SYRIA, ENDORSED BY RUSSIA

Marked in orange: THE TERM "REFUGEE CRISIS" START CIRCULATING IN EUROPE

Events below the line:

- SYRIAN CIVIL WAR
- DEMOCRATIC ELECTIONS IN EGYPT, TUNISIA AND LIBYA
- REPORTED CHEMICAL WEAPONS USED AGAINST CIVILIANS IN SYRIA
- EGYPTIAN MILITARY SEIZES POWER AND REMOVES THE ELECTED GOVERNMENT
- SEVERAL DEMONSTRATIONS ARE MET WITH OPEN FIRE BY THE NATIONAL REGIMES
- NATIONAL DEMONSTRATIONS IN MANY ARAB COUNTRIES
- ISIS IS PRACTICALLY CAST OUT OF SYRIA

Whether or not their asylum application yields a positive result depends on the politics applied by the different countries in Europe. When these countries decide to close their borders, the refugees are effectively stuck in their camps. When Hungary closed its borders for refugees in October 2015, this led to an accumulation of refugees in camps such as Moria (Reynolds, 2015). Moria is in this way very reactive to the political climate in Europe, and though politics can be unpredictable, the influx of refugees is high and the outflux is relatively low, creating an accumulation of people in the camp.

In a year after the hotspot approach was implemented the EU made a deal with Turkey to try and reduce the number of displaced people crossing the border. The deal stated that the EU would pay Turkey to stop refugees from crossing the border to Europe, and almost immediately reduced the number of refugees entering Lesvos (Batalla Adam, 2017; UNHCR, 2020a). This deal has been given a leverage over the EU and might send has been disputed, with arguments that Turkey has refugees over the border to sway the EUs actions.

MORIA FROM THE OUTSIDE

The background of the Moria camp explains how its inhabitants are divided into groups already before they arrive at the island. Though these groups are formed by different juridical and social arrangements, they effectively separate the population into two rough groups.

The fieldwork was especially important for describing Moria, as finding credible descriptions of the camp in published media has turned fruitless.

BACKGROUND FOR DEVELOPMENT

Through the informal conversations held with refugees in Moria it became evident that civil war and the rise of religious militant groups such as Taliban, ISIS and al-Shabaab, are the underlying factors which have sent the majority of displaced people on Lesvos to flee their home country. Shootings, bombings and shelling that are destroying houses and neighbourhoods, or the fear of such attacks, made entire households of families flee. Political persecution and threats have the same outcome, as these usually target the whole family. Because of this, there is a trend in the Moria camp that people from countries of the Middle East, such as Syria, Iran and Afghanistan, in addition to Somalia, where war and political persecution is the main driver for displacement, stay together in families.

Other conversations proved that another main reason for displacement is natural disasters such as drought and famine, and crises such as poverty and unemployment. Though this threat doesn't have the same air of urgency as war or persecution does, it is equally critical and life-ruining. People fleeing from this usually chose to do so alone, as it might be cheaper and easier than travelling with a group. It is usually a young man who takes this journey, sometimes with the economic support of friends and family, and sometimes with the goal of sending money back home once he is settled in a new country. In Moria, the single men who flee for these reasons are usually from areas in Africa, such as the DRC, Nigeria, Ethiopia and Somalia, and some areas in the Middle East, such as Afghanistan.

There is usually a number of reasons behind each person's decision to flee and pinpointing their reason to be one of these two is an oversimplification. It is often a mix of both social, economic and safety reasons, and regardless of whether they have existed long-term or appeared suddenly, they generate the same sense of desperation and urgency.

INTERNATIONAL HUMANITARIAN POLITICS

Although separating people into one of these two categories might be problematic, it is customary as it is useful for international humanitarian politics to process people in groups. People who flee from war or political persecution are given refugee status and guaranteed asylum in another country, while people who flee for reasons such as drought, famine, poverty and unemployment are given migrant status and do not have the same right to have their asylum application honoured. Because displaced people from the same area usually flee for the same reason, this categorisation of refugee and migrant often divides people along geographical lines, which effectively often also are ethnic and cultural lines.

In Moria, roughly, the majority of displaced people from the Middle East, in addition to Somalia, are given refugee status, while the majority of Africans, except Somalians, are given migrant status. There are also people who fall outside of these two groups. Because their asylum application is being prioritized in relation to this status, many Africans stay on the island for significantly longer than the rest. While a person from the Middle East might stay in the camp for an average of six months, a person from Central Africa might stay for two or three years. This division is visualised in Figure 29.

Because the distinction between refugee and migrant is difficult to make, this project will refer to all the inhabitants of the Moria camp as either refugee or displaced people.
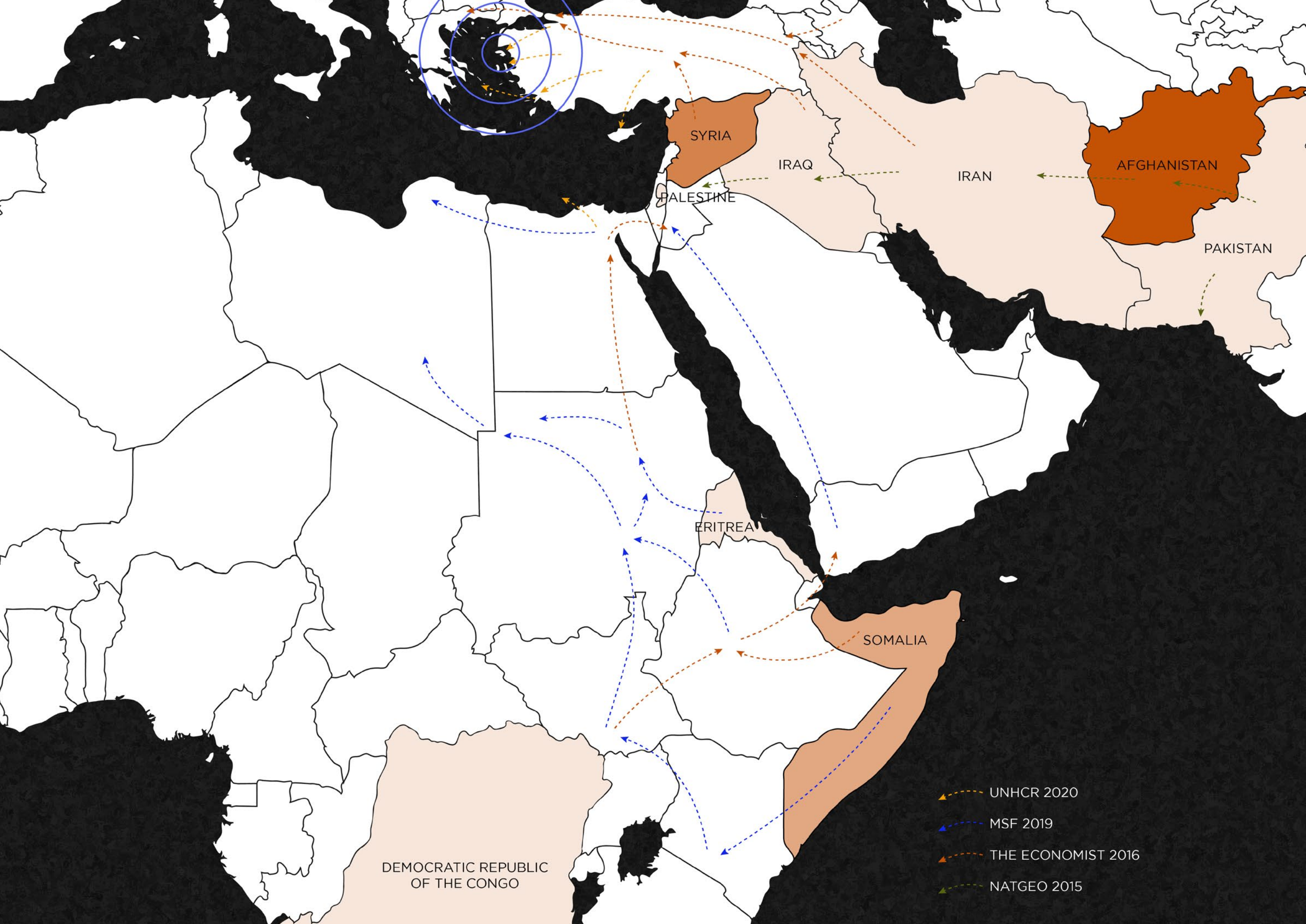
SYRIA
IRAQ
PALESTINE
IRAN
AFGHANISTAN
PAKISTAN
ERITREA
SOMALIA
DEMOCRATIC REPUBLIC OF THE CONGO

UNHCR 2020
MSF 2019
THE ECONOMIST 2016
NATGEO 2015

MORIA FROM THE INSIDE

CAMP MANAGEMENT

When it was first transformed from a military base to a refugee camp in 2015, the Moria camp was dimensioned for 3000 people (Cupolo, 2015). Because the military still owns the land, the Hellenic army together with the local police are in charge of running and overseeing the camp. This is not immediately obvious when visiting the site, however, because they are not often seen on the ground unless it is to deal with turmoil between refugees or between refugees and locals. The refugees are not particularly trustful of the military and police, something that is exemplified by speculations made by some refugees that the administration occasionally cut the electric wires to the camp to stop the refugees from charging their phones and post scenes from the camp online, or that drugs are put in their food to make them too docile to riot. No proof has supported either of these accusations.

As Moria quickly surpassed its limit of 3000 inhabitants, it became known in international media as a waiting hell (Tsangarides, 2015). This caught the attention of the global humanitarian responses, who felt compelled to help. NGOs quickly started arriving to the island in large numbers and have taken on responsibility for many of the central affairs. It is undeniable that without the help of these organisations the situation for the refugees on the site would be much worse than it currently is, yet the untrained assistance of the young volunteers is not enough to provide long-term relief.

The NGOs register the newcomers, offer educational courses, kindergarten services, medical help and recreational activities, as well as help distribute water, food, clothes and materials. In practice, it is the NGOs that run the camp.

However, there is minimal communication between the NGOs, which leaves overlaps and gaps in the services they provide. The agencies each have their own hierarchy and hire people from all over the world, they may fight among each other or clash with local leaders, and with a continuous change of staff it is difficult to create any overview of the situation. In 2016 the military reportedly purged all NGOs from the site, but since then they have come back in a greater number.

TENSIONS BETWEEN REFUGEES AND LOCALS

The local land is strained by the uncontrolled growth of Moria, and international media has shifted from focusing on Lesvos as a tourist paradise to focusing on its refugees. Several locals have expressed concern for this change of identity in the international eye. As a result, many are skeptical of keeping the camps on the island. Greek authorities have tried to relocate the refugees to alleviate the tensions between refugees and locals, but as construction started on a new site in 2020, it was protested and vandalized by the locals, see attachment 1 for more info. It is important to underline that despite the monotone focus of the media, there is also a lot of sympathy and support for the refugees to find among the local Greeks.

TENSIONS BETWEEN GROUPS OF REFUGEES

Although social tensions between refugees and locals can be disruptive, tensions within the camp are by far the most harmful for the refugees. Conversations with refugees revealed that many speak of people settled in other areas of the camp with extremely racist slurs, comparing them to thieves, murderers and dogs. In many cases, both

Single men
Young adults
Africa
Migrant
Typically >1 year in Moria

Families
Children to adults
Asia
Refugee
Typically <1 year in Moria
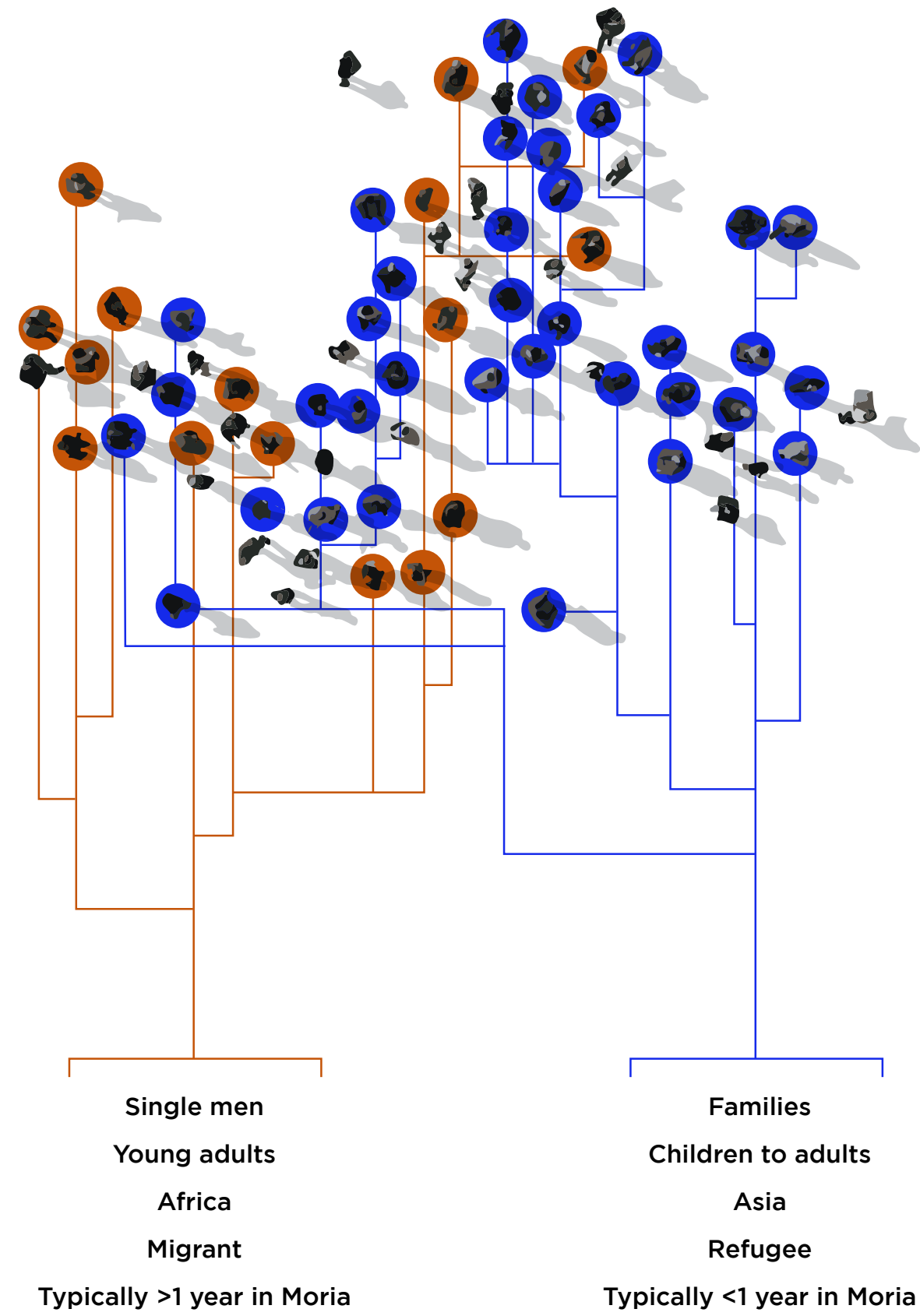
sides of the conflict that caused the refugee to flee are represented in Moria, leading the conflict to continue even in the camp. The difference in the longevity of the stay in the camp also proves to be a point of conflict, as many with migrant status perceive that they are unjustly treated and grow hostile of newcomers from areas that typically receive refugee status. These tense social relations seem to follow both cultural, ethnic and religious lines, and are only enhanced by the density of the camp that forces the groups to socialize and that leads to social frictions.

These social frictions have led to aggression, open violence and even murder (Connelly, 2016; Lowen, 2016; TNH Staff, 2020). The relationships of who hates whom creates an extremely complex social map within Moria, a map that it is almost impossible to get a full overview of, and that will most likely change over time as new people arrive and situations in their home country change.

CAMP GROWTH

Signs of the site's military background are found several places in its structure. It is surrounded by concrete walls, topped with a barbed wire fence. Tall, bright lights light up roads and entry ports wide enough for trucks and tanks to drive through. The original concrete buildings are preserved but repurposed.

As the camp has become crowded and overcrowded, settlements have expanded into nearby olive groves. Thus, the camp can be divided into an "official camp" and an "unofficial camp," see Figure 30. Both are densely settled, though the official camp is packed to the point where it is bursting at the seams. Holes in the fences surrounding the official camp are used as main points of entry by both refugees and volunteers. What can only be described as the main market

street crossing the camp starts through such a hole and ends in a makeshift bridge established by the refugees themselves.

It is apparent that the official camp had an original plan that was followed until it became too crowded for it to be possible to follow any more. All functions originally needed for the camp are placed within the concrete walls of the former military camp, such as the registration point, sections for single women and unaccompanied minors, water taps, showers, and the detention centre. The living quarters are typically isoboxes (isolated "boxes" or containers), with tents littered among them wherever there is space. The isoboxes, distributed by the UNHCR and measuring 3 by 6 by 3 meters, have been reported to each house 24 people. The "streets" are narrow, and some are covered in gravel to drain away spill water. The previously mentioned market street is cast in concrete, as are a few others that have previously been used by military vehicles. An overview of the layout of the official camp is shown in Figure 31.

Private, fenced-off sections for unaccompanied minors, single women, and women with children is found inside the official camp. In these sections are found children down to kindergarten age and women who have asked explicitly for extra security for them or their children. As these groups are very vulnerable and Moria consists of almost 60% women and minors, the private sections are an important element of the camp. Also important is the detention centre, or the jail, where the police send the Ali Babas of the camp. The name Ali Baba is used especially by children to describe any person who steals, fights or kills, and so there are many Ali Babas in Moria.

The unofficial camp is comparatively less holistically planned. Refugees are asked to find their own living area in the landscape after little to no introduction to the area, creating a sprawl-like

The unofficial camp encompasses zones 6-12

The official camp encompasses zones 1-5

Main market street

Military area
Unavailable to camp residents and administrators

Area for unaccompanied minors, single women and women with children

All black squares are offices for refugee registration and camp administration

Main entrance

Each unmarked square represents one isobox
Tents are not marked in this map

Main camp showers and wash station
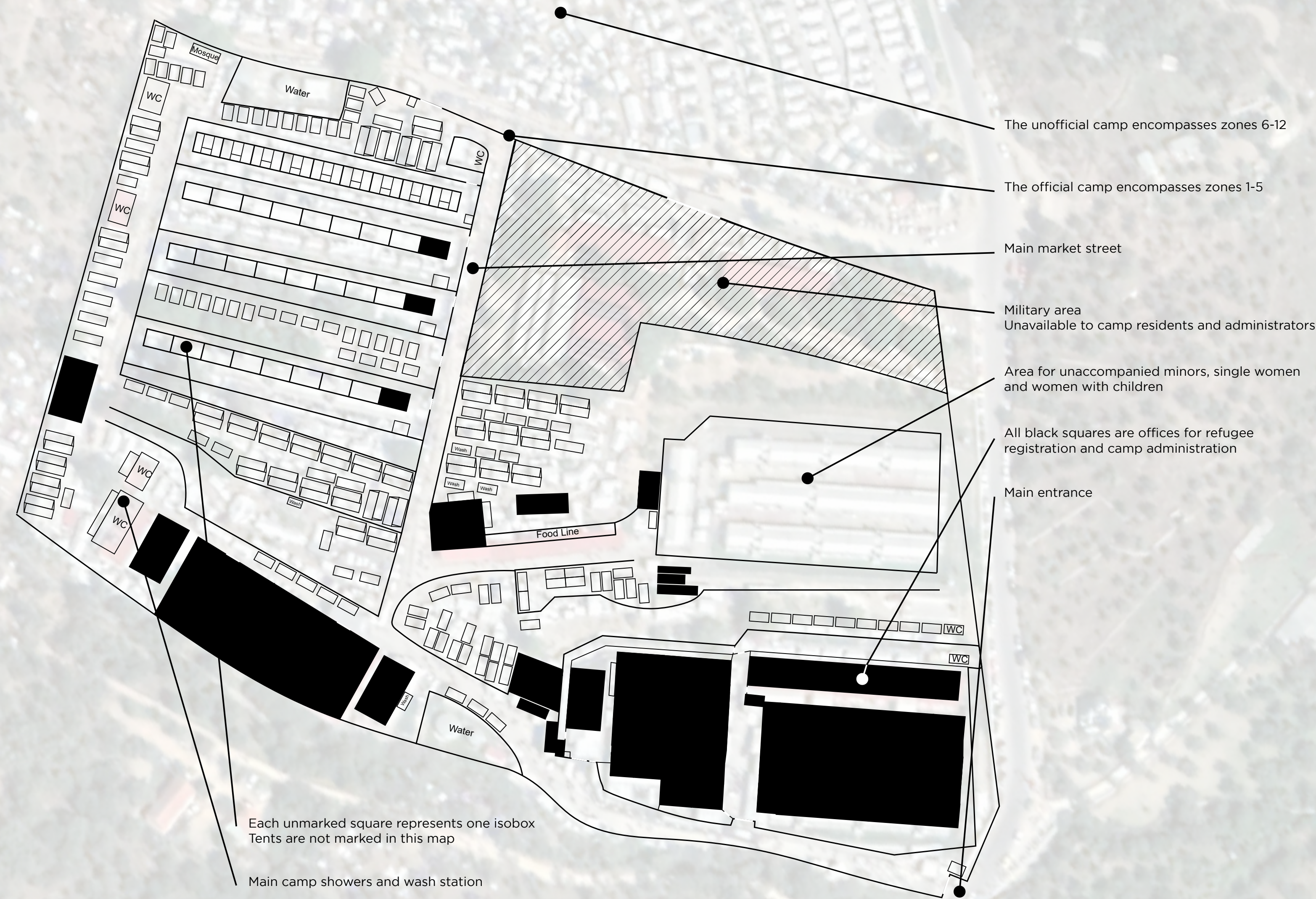
Panagiouda

Future expansion of Moria camp
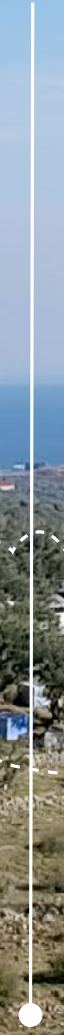
Expansion of Moria camp
(Unofficial camp)

Kara Tepe refugee camp

Moria village

Moria refugee camp
(Official camp)

Mytilene

camp structure. Except for a portion of the northern part of land, which is leased and overseen by the NGO Movement on the Ground, the unofficial camp is dominated by garbage bags, mud roads, and makeshift tents, typically made of pallets, tarp and blankets. Some families and groups who live together have fenced off their tents and the area around it using branches or scraps of material found in the surrounding area. This enforces a sense of private property similar to what they might be used to from home. A few water taps can be found, though these are typically water hoses or holes in those. A street following outside the southern wall of the official camp function as a main street, with grocery markets, hairdressers and restaurants. A comparable street following the outside of the northern wall is used for similar functions, though it is also used to collect garbage and is furnished by leaky portapotties (portable, temporary toilets typically used in festivals).

The expansion of the camp has not happened without impacting the local landscape. The area used to be an age-old olive grove spread with ancient olive trees and stone terraces. Today the trees are burned and chopped down to make room for the blue and white tarp tents that scatter the hillsides. Some trees and stumps are kept to hang washing in or hold up tents, but most are cut down for materials or firewood to keep warm during the cold nights. As the landowners want to hinder the destruction of their groves, the refugees are not given any tools for cutting wood. To work around this, they burn the hard olive wood until it is thin enough to break or be chopped off with tools they are left to make themselves.

Although the conditions of the camp are inhumane (Human Rights Watch, 2016), it is interesting to see how much it has in common with a city. The wider streets are used for social functions such as market, selling street food, and social meetings. Public and private areas help create a network of paths similar to what might be found in an urban neighbourhood, albeit a dense one. Bakers are making Afghan bread or Syrian pancakes, selling them to families or passers-by. Kids are playing together wherever there is room, in fenced off garden areas around each tent, in the streets, or in the mud where built structures are yet to be placed.

LOCAL CAMP ECONOMY

Displaced people on Lesvos are not allowed to do labour as this requires a permanent address in Mytilene (Islam, 2020), yet shops and markets such as can be seen in Figure 34 are tolerated by the management. In addition to sales, businesses such as restaurants offer a place to meet others and, importantly, to charge phones.

Conversations in the camp also revealed a property market run and operated by its inhabitants. Since a minority of the inhabitants know how to build a properly structured tent, groups of them build tents to sell to newcomers, see Figure 33. The price is decided by the cost of materials, number of manhours, and placement of the tent – meaning a tent closer to a main street will cost more than a tent further away. The price for a tent might vary from between €300 to €450. The cost of the materials alone is about €150.

ACTIVITIES AND SOCIAL LIFE

Since having a job is not juridically allowed, the majority of residents in the camp spend their days without anything to do. Many lay in their tents all day, which makes it difficult to sleep at night. Some spend €2 on a bus ticket to Mytilene to go buy necessities there, or simply to have something to do that day. Many decide to save the money by walking the two hours it takes to get there, and the two hours it takes to get back. If grocery shopping

Figure 35. The washing station in the official camp (Nicolai Overrein, 2020).

Figure 36. Culinary experiences in Moria.
a-d - Afghan ovens are made by brick and clay found in the area and used to make Afghan bread (Photo b and d by Christian Dierk, 2020)
e - Food such as homemade soup and falafel are sold along the main market street in the official camp.
f - Pancake with sugar made by a Syrian family.
g - Afghan bread is made with ingredients that are easy to find and sold for €1 a piece.
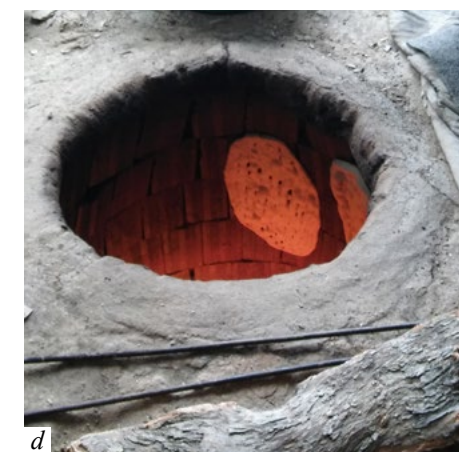
is needed, many decide instead to go to the 'local' Lidl 45 minutes away.

A lack of kindergarten and school facilities make it difficult for minors to continue their education, though some NGOs offer these services for a small number of children. Educational courses are also offered to adults by a few NGOs, such as the language and drawing courses offered by the Drop in the Ocean. Other than what is provided by NGOs, there are no organised social activities in the camp. Some use the grassy fields between the camp and Moria village to play soccer, and one playground has been established in the northern part of the unofficial camp, pictured in Figure 34. The lack of playgrounds for the approximately 7000 children in the camp has made a muddy slope between the Moria river and a trash deposit south of the official camp a popular playing area for children.

The lack of activities to do in the camp is potentially life-ruining for the inhabitants, as the trauma many have experienced in their home country or on their journey to Europe is left unprocessed (Nutting, 2019). Many, especially in the group of young single men, end up spending their days sleeping and their nights drinking as they lose hope in ever reaching mainland Europe. Reported use of violence often originates from this group, on occasion unfortunately ending in murder. It follows that the lack of organised activities is a potential driver behind the violence in the camp.

HEALTH

The capacity of the health services of the camp is not high enough to cover all the inhabitants. Exactly how many healthcare professionals there are is difficult to know, as these are provided by NGOs (MSF, s.a.). The trauma the people experience by being forcibly displaced and journeying to Lesvos,

together with the appalling living conditions of the camp significantly contribute to the deterioration of their mental and physical health, and it is reported that many have tried to take their own lives (Barberio, 2018; Nutting, 2019). Spending their days inside their tents, as many do because of the lack of other things to occupy their time with, also significantly increases their chance of developing depression and anxiety (MacKerron & Mourato, 2013). Health problems among children is an especially big concern, as almost 40% of the inhabitants are minors and especially exposed to conflict-related stress (Lustig et al., 2004). The line of problems that are experienced in the camp can contribute to removing the sense of everyday life and routine of habit that is important to maintain in order to process trauma such as that which refugees might experience (Hou et al., 2020).

Because of the density of the camp, if disease were to be introduced it would spread rapidly and be exceedingly difficult to stop. With the outbreak of COVID-19, this has been a major concern for healthcare professionals operating on the island, especially as the density of Moria makes social distancing impossible. MSF has urged the evacuation of the refugee camps in order to save lives, though this has not been followed up (MSF, 2020).

FOOD

The food provisions of the camp are given by a catering team consisting of NGOs, providing the residents with three prepared meals a day. Waiting in line for food can take several hours. Many prefer to skip these meals, and instead spend their monthly allowance of €90 on buying groceries and preparing their own food. Those who don't have an oven suited for cooking, can build their own in clay or create a fireplace outside their tents, see Figure 36.

Figure 37. Garbage in Moria is collected in select areas. That which is not available for the garbage truck is left behind (Christian Dierk, 2020).

Panel 5. The family arrives in Moria.

Every night the air is full of the smell of burnt wood and plastic. People use what is available as fuel for their fires, which often happens to be wood from the olive trees, plastic or other flammable items, as in Figure 34. This has sent tents and isoboxes up in flames and had lethal consequences on several occasions (Lowen, 2016; The Guardian staff, 2016).

WATER AND SEWAGE

The fact that the infrastructure was dimensioned to cover 3000 people originally, create many problems as the number of residents of the camp grow. A big problem is the lack of a proper water and sewage network. Portapotties are used as toilets all over the camp and are rarely, if ever, emptied. Waste from these runs over ground down the streets people walk every day. Washing water is connected to the local water network, and reportedly works fine except for low water pressure and the lack of warm water. Some prefer not to use the washing station because it is dirty and the line usually lasts for several hours, see Figure 35. This accentuates the hygienic problems of the camp.

Drinking water is provided in packaged bottles and has not yet caused any other problems than that of littering. Bottled water is not recommended as the main source of drinking water by Sphere or the UNHCR, because it is less cost-effective, appropriate and technically sound (Sphere Project, 2018; UNHCR, 2015).

ELECTRICITY

Another major problem of the under dimensioned infrastructure is the electric network, where power cuts are common and frequent. To try and provide electricity to a larger area, the inhabitants have fixed additional wires from the power lines to individual tents, typically the ones housing commercial businesses such as restaurants. Not only is this dangerous work to undertake without the proper equipment, but the expansion of the network puts a strain on the electric capacity of the camp as a whole. As phones are the main mode of communicating with family and friends in their home country, the technical issue of the power cuts is also a social one.

GARBAGE

Garbage is picked up by a truck and transported to the local garbage burner. The inhabitants collect garbage in plastic bags and leave the bags in piles where a truck picks them up. Only garbage bags in the designated areas are picked up, stray bags and waste is left behind. A representative from Eurorelief estimated that the truck picks up two tonnes each week, and that this is not enough to remove all garbage from the camp. The Moria river south of the official camp has effectively become a dump site for garbage, see Figure 37.

SUMMARY

The Moria refugee camp does not struggle with one singular problem, but with a series of minor and major issues of social, political and physical character that create an unstable and unhealthy environment for its inhabitants. Outside factors such as international law and reason for displacement, divide the inhabitants of the camp roughly into two groups. Use of violence often originates in groups of young, single men, likely because they stay in the camp for a longer period of time and because there are very few organised activities for them to partake in. Social frictions and safety problems together with the lack of access to food, water, sanitation, health care and other basic necessities, coupled with the lack of perceived everyday life within the camp create an environment that is both physically and mentally straining and poses a threat to people's lives and well-being.

The inhabitants of the camp have given Moria a dimension of urbanity by the creation of social and economic activities such as is found in neighbourhoods and the main streets where goods and services are sold. These urban structures are however still made in the framework of Moria being a "camp," which punctures this growth. Temporary solutions to shelter, water and food distribution, together with unsatisfactory and undersized solutions for washing water provisions, the electric network, garbage disposal and the overall camp size perpetuates the idea that the camp is not meant to last. Coupled with an unorganised administration of volunteer organisations with central responsibilities, the inhabitants are left to live in the messy paradox between the temporary and the permanent, seeking the liveable by creating their own, informal urban structures.

THE CITY

A design for a city adapted to resolving the number of problems faced by the refugees in the Moria camp is eventually presented. Before this, the arguments to creating a city for refugees on Lesvos rather than a camp will be further explored, leading to the decision-making process behind the establishment of an urban space.

Because of the particular situation Lesvos is put in, where there is a sudden and huge influx of people, it is possible to construct a city and have it populated and set in use almost immediately. However, the particular situation also dictates that this city would not take shape in the same way other urban sites would, which would be to incrementally grow over time, from a village to a town to a city. Instead it would need to be established as a new urban element in the landscape, which can be a perilous affair to design with risks of creating completely unattractive and uninhabitable spaces (Jin et al., 2017). An attempt to avoid this is made by looking towards those that have been experts in founding new cities where there were none to begin with, and who did so in the same geographical area Lesvos is placed in – the Romans.

As their troops conquered new areas in Europe and the Middle East, the Romans left a trail of cities behind them, connected by paved, solid roads (Grimal, 1983). The cities became trade centres and safe havens for the local population, who in turn would support the Roman claim to the lands. This support was indispensable for the continued expansion of the Roman empire, as it reduced the number of local rebellions which would otherwise take both time and resources to strike down on (Grimal, 1983).

In order to quickly and efficiently build the new city, the Romans would impose the same, simple plan wherever they went. The plan was composed of a grid and a number of standardized elements that

had been deemed appropriate of a city (Boeri & Koolhaas, 2000). It had the advantage of being easy to understand and thus easy to construct, both by the initial group of Roman soldiers sent into the field and by the native workforce (Grimal, 1983). As a testament to the quality of Roman city making, many cities founded by the Romans, such as Cologne in Germany and Lyon in France, are still habited and thriving today.

Though this approach was certainly followed to pacify the native population after a conquest, the Romans doubtfully would sacrifice the resources, time and energy needed to construct a whole city with only this in mind. After all, they could have easily set up a camp instead and moved on to the next conquest with both time and men to spare. Their reason for choosing the city likely also stemmed from an egocentric sentiment– it would benefit the individual Roman. For the travelling solider, military leader, religious official or others who might find themselves joining the conquerors, it would be more comfortable and enjoyable to stay in a city than to stay in a camp. And since the people who would inhabit the settlement were the same as the people who would build it (excluding the local population) cities became the norm.

Creating a camp is only a legitimate solution for the supervisor outside its borders, as camps are made to be a site to store people – like you would with cargo on a shipping harbour. Even well-planned camps, with adequate facilities and the freedom to roam the surroundings, are founded in this idea that it is a practical storage space until the people can be shipped away. Regardless of whether it is a military camp where the supervisors take part in the activities, or a concentration camp meant for the mass execution of thousands of people, this fundamental idea remains, and contributes to reducing the inhabitants of the camp to objects (Agier, 2011).

Where the camp is made to store people, the city is made for people to live in, and in that way it belongs to the people that inhabits it. A city allows for interaction, conversation, impressions and development, and for impacting and being impacted by the surroundings.

Moria is the worst-case scenario of a refugee camp and not at all the norm that humanitarian response standards such as Sphere's Handbook and the UNHCR Handbook tries to produce, or what the army of NGOs and volunteers on Lesvos has ever tried to implement. Well-functioning refugee camps with adequate facilities and security, such as Turkey's Kilis, do exist and can prove to be sufficient for the refugees and the local population to be content in their situation (Biçer, 2017). Properly planned and realistically dimensioned, a camp can be a capable holding place for refugees. Yet when people are to stay at a site indefinitely, they will need to be viewed as more than cargo occupying space, and will more than ever need the right to shape their surroundings, and with it their right to the city (Sanyal, 2012).

Hosting tens of thousands of refugees on Lesvos will impact the island. However, each person must still be allowed to occupy space. With appropriate planning respecting both people and land, the occupation of space need not be destructive in the way it is today. The urban layout can be respective of the local landscape even with a lower population density than that of Moria. By taking care to adopt the urban layout to the landscape, the city that is created will be healthy and liveable, while also minimizing destruction of the local land and cultural heritage.

Any plan for a settlement for a large number of people will need infrastructure such as road, electricity and pipe networks in order to create a space that is at all habitable, and when installed, infrastructure sets a lasting impact on the

landscape. According to what Fredrick Cuny noted in 1977 (see page 24), a camp plan becomes a city plan when elements such as roads, water, sewers, housing and schools are included. In many camps today, including Moria, some infrastructure is installed to last long term, while other elements, such as housing, are only offered as temporary measures. This system manages to achieve the worst of both worlds – it is resource consuming to plan and establish the long-term infrastructure, yet at the same time it offers only temporary living conditions for the inhabitants. By instead planning for all infrastructure, housing, schools, etc. to be established as lasting elements, the plan will be less wasteful of the resources while also offering better living conditions for the inhabitants.

The construction needed for these elements to be installed will also create a number of jobs. By employing locals to fill the positions, this job market can be economically beneficial for the island compared to the solution that is applied today. Thus, in addition to establishing better living conditions for the inhabitants and inflicting less damage on the local landscape, planning for a city rather than a camp can also contribute to the local economy.

POPULATION AND SIZE

The number of inhabitants in the Moria camp is constantly increasing and is likely to continue doing so in the time to come. To avoid a further under dimensioning of the infrastructure and facilities needed by the refugees, the city will need to be designed to house more than the current population of the camp. However, the exact number of refugees that might be present on the island in the future is difficult to calculate, as demonstrated in Figure 3, and so an estimation will need to be made.

To make this estimation, it can be fruitful to revisit the experts of city making. A recent study on the ancient Roman cities in Europe, the Middle East and North Africa have managed to estimate the populations of the cities through calculating their population densities (Bowman & Wilson, 2011). This study estimates that a population density of 10-15 000/km^2 was likely realistic in the cities, and that this means that many of the cities had a population of between 5-30 000, depending on their size. Cities with more than approximately 30 000 inhabitants seem to have had a greatly higher population, such as Beirut which at the time had 50 000 inhabitants and Alexandria which had 500 000 (Bowman & Wilson, 2011).

It is difficult to know exactly why so many ancient cities had up to 30 000 inhabitants, but it is likely that it was a deliberate planning measure as the Romans were expert planners. It might have been their belief that most cities would start to wilt and collapse at higher population numbers than this, or it might again have been the egocentric sentiment – that a city of up to 30 000 inhabitants was more comfortable to live in. No matter the reason, the decision to make the city this specific size was likely based on Roman empiricism and is therefore a factor this city design can take basis upon. The new city should therefore be designed to house up to 30 000 people.

Moving on to the footprint of the city, this will be calculated by identifying a reasonable density and multiplying this with the city population. To follow local building style and practices, the density of the city should be in line with the density of the existing settlements in the area. This includes the villages of Moria with a density of 6000/km^2, Panagiouda with a density of 3000/km^2, and Pamfila with a density of 4500/km^2, each located north of Mytilene.

Most comparable to the new city is, however, Mytilene with its approximately 30 000 inhabitants.

The density of the city is almost 8000/km^2, though it should be noted that there are vacant buildings in the city that, if occupied, would have provided a higher density. The same goes for Moria village.

Since the south-east coast of the island is largely used for agricultural purposes, notably olive production that has existed in the area for several thousand years, the footprint of the city should be limited as to provide minimal impact on the land, thus driving its population density up. Based on this and on the population density of Mytilene, the density of the new city can be set to be approximately 10 000/km^2. This is comparable to the density of Aleppo and Baidoa in Figure 14 and 15, and is also in line with Roman empiricism. With 30 000 inhabitants, this results in a footprint of approximately 3 km^2, including roads, security, administration, city functions and living area.

DESIGN PRINCIPLES

The field work on the island revealed how the Moria camp is struggling with a multitude of social and spatially bound problems that produces squalid living conditions of conflict, violence, sickness and despair for the refugees. Many of these problems stem from the lack of holistic administration of the camp, which leaves many voices unheard and many issues untreated. The problems regarding healthcare cover, food and drink provisions, and the lack of organised activities can be traced back to this.

Another major origin of problems is the constant under dimensioning of the spatial functions of the camp, such as the infrastructure, living quarters, public space and meeting points. The high density is likely a major cause of the social conflicts of the camp. The spatial layout and under dimensioning of the camp is likely also a driver behind the tensions between the refugees and locals, by creating

conflicts over land rights and land use.

To ensure that the problems of the camp are not brought along to the city, the new spatial design will accommodate for their solutions. These are presented as design principles on the next spread and will be the basis for the new urban life.

Several of the design principles are also supported by the discussion of the three sub-questions of the topic question:

How to facilitate an urban structure for the use of refugees?

How to facilitate for a life with dignity for the refugees on Lesvos?

How to facilitate for a rapid succession of people in a permanent urban structure?

To easily identify this, each principle is marked to show what sub-question it answers. Principles without any markings are tied only to observations in Moria.

Principle 1:
Refugee participation in settlement administration

Principle 2:
Greek city administration

Principle 3:
NGOs in supporting roles only

Principle 4:
An appropriately dimensioned health service staffed with educated health personell

Principle 5:
Greek grocery stores as main providers of food
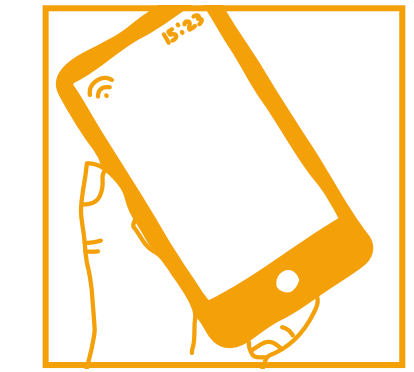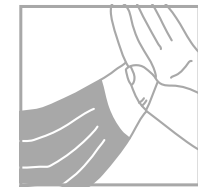

Principle 6:
Employing locals to work in city maintenance

Principle 7:
Encouraging refugees to participate in city life

Principle 8:
A functional water and sewage system

Principle 9:
An appropriately dimensioned power source

Principle 10:
Internet coverage

Principle 11:
An appropriately dimensioned garbage disposal system

Principle 12:
En extensive cyclist and pedestrian road network

Principle 13:
Bus connections to nearby cities and shops

Principle 14:
Self-allocation of the people

Principle 15:
Accomodation for initial, short-term stay

Principle 16:
Long-term housing

Principle 17:
Private semi-outdoor spaces in front of houses

Principle 18:
Private sections for unaccompanied minors

Principle 19:
Private sections for single women and women with children

Principle 20:
Architecture and building practices following local style and norms

Principle 21:
Preserve existing olive trees

Principle 22:
A separation of private and public spaces

Principle 23:
Safe streets and public areas, even at night

Principle 24:
Social community meeting points for family, friends and neighbours

Principle 25:
Social citywide meeting points for mixed cultural contact

Principle 26:
Public services available to all

◇ How to facilitate an urban structure for the use of refugees?

◯ How to facilitate for a life with dignity for the refugees on Lesvos?

△ How to facilitate for a rapid succession of people in a permanent urban structure?
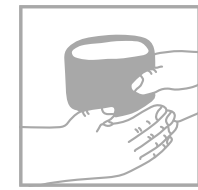
1. Following the example of Kilis to ensure the problems that might occur in the everyday life of the refugees are resolved, the city should be divided into districts, each of which will have an elected refugee representative. These representatives form the city refugee council and should meet on a regular basis to discuss matters of concern for the inhabitants of the different districts. The council should also provide the main communication between the city administration and the refugees.
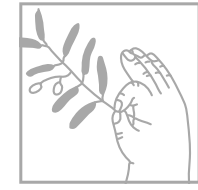
2. The overseeing of the city should be done by a team of Greek administrators to ensure that it is not excluded from the local urban and social environment, and that it is consistently run on a day-to-day basis. The administration will be responsible for employing locals for principle nr. 6 and for keeping track of what work the refugees might participate in for principle nr. 7. Furthermore, the administration is also responsible for giving out job certificates for this work that the refugees can supplement their CV with, to stand stronger in the job market in Europe or their home country once they leave the city.

3. The NGOs represented in the city run cafes, provide rental bikes, put on plays and concerts, provide language and drawing classes, play music in the streets and provide other cultural input. Their role in the city is important for this purpose, and the presence of volunteers might contribute to the local economy.

4. The health centre is further detailed in figXX.

5. Moving away from the principle of catering, the refugees are instead encouraged to choose the food they want and to prepare it as they wish. With their own kitchens, argued for in principle nr. 16, cooking food can contribute to creating a sense of everyday life by giving the refugees a routine to follow. The presence of Greek grocery stores staffed with locals will contribute to the economy of Lesvos, while admitting three competing chains will ensure market prices. This principle has been used in Kilis, endorsed by the World Food Programme.
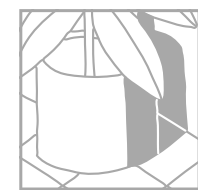
6. The administration can hire locals to do construction work, maintenance, to work in the grocery stores, as teachers, or as nurses or doctors in the health centre. These positions will be paid by the administration, thus allowing the city to become a part of the local economy.
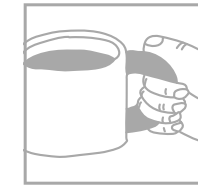
7. To counter the problem of the lack of refugee activities to do, they will be encouraged to participate in the city life through engaging in different amounts of volunteer work. The refugees should be able to dictate what this work will consist of themselves. Examples can be to run barber shops, sewing workshops, beauty centres, bicycle repairs, hairdressers or tea shops, or to cook food to sell at the market. For those positions that will need rooms or equipment, an application should be sent to the administration to rent or borrow what is needed for a reasonable amount of time.
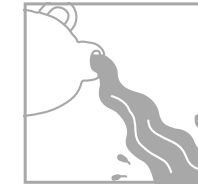
8. A pipe network ensures that each house is connected to the local sewage system and that drinking water is provided in the tap. See also principle nr. 16.
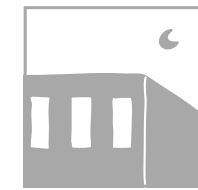
9. The city is connected to the local electricity network. By replacing the existing fossil fuel power station with a new waste-to-energy plant, the city and the rest of the region could benefit from a more climate-friendly power source.
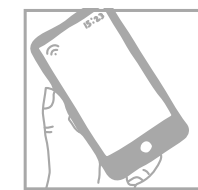
10. Stable internet coverage is important for the refugees to keep in touch with their friends and family in other countries.
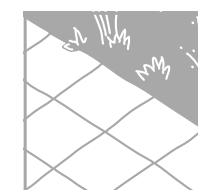
11. Waste is separated before being picked up and brought to the local waste collection point.
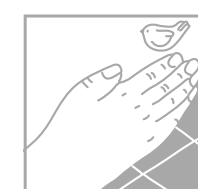
12. The streets are created without the car in mind, as none of the refugees arrive at the island with their vehicle. In lieu of this, the bike will become the main mode of transportation, second only to walking.

13. An intracity bus line allows for quick transit from A to B, while intercity bus correspondences will make it easier to travel to and from the city, connecting it to the other parts of the island.
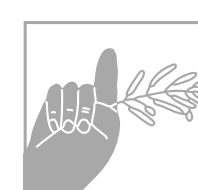
14. The incoming refugees are to decide where they want to live themselves. For this to function according to the Schelling model, there needs to be an approximate 10% vacancy at all times. This self-allocation will likely create a certain level of segregation between the different groups of people, but it will also create neighbourhoods that the inhabitants feel satisfied living in. Countermeasures for the segregation can be seen in principle nr. 25.
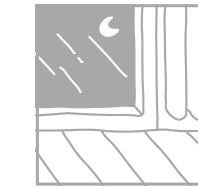
15. Immediately after arrival, the refugees are to stay at a site for initial accommodation yet will only be able to stay there for a couple of days or maximum a week. This idea is twofold: both to ensure that the refugees will be met with a warm, safe place to spend the first nights, and to give them time to look around the city before deciding on which apartment they want to stay in long-term. See Figure 38 for more info.

16. Each apartment is equipped with electricity, running water, cooking facilities and beds, and are, as proposed in principle nr. 20, constructed using local materials and styles. They will be kept small to encourage the inhabitants to spend time outdoors, either in their own garden or in public areas, to mingle with others and benefit from the fresh air.
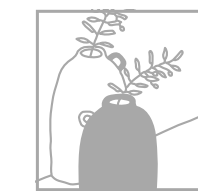
17. Gardens are provided with all two-storey houses, and will be a private space that each group or family, living in the accompanying apartment, will be able to use and alter at will. This will be further explained later on. Many who come from areas where it is common to grow food on their own land, such as parts of Somalia and Afghanistan, might want to continue doing so. By laying all infrastructure, such as water pipes and electrical cords, under the roads, the ground under the gardens will be undisturbed and it will be possible to plant vegetables here.
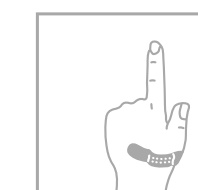
18. Following the practice of Moria today, unaccompanied minors are accommodated in a safe area with around the clock adult supervision.

19. Single women and women with children are also accommodated in a safe area with supervision.
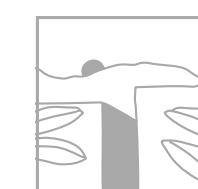
20. What is to be created is a European and a Lesvian city and it should therefore be made with local materials following local building norms This will ensure the longevity and quality of the structures made.

21. Olive trees are an important part of the landscape and the local cultural history and should therefore be preserved to the fullest degree possible.
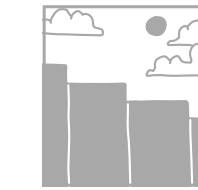
22. Following the urban form of many of the cities in the Middle East and the Arab world where the majority of refugees originate from, there should be a distinction between public and private space that allows them to continue practicing urban life the way they are used to. The gardens of principle nr. 17 play a big part in this, as they can become extensions of the indoors for each family to utilize.
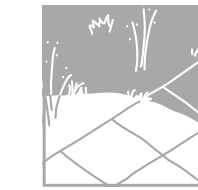
23. Safety in public areas is important for the city to be perceived to be open for all. To ensure this, street lights will light up at night and windows facing from the apartments and offices towards the public spaces ensures that eyes are always on the street.
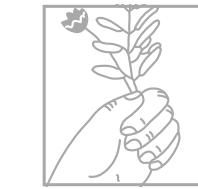
24. As social meeting points for friends, family and neighbours can help create a local network of support for the individual, meeting places on neighbourhood level is important to establish. Schools and religious centres, further described in figXX, are social arenas placed in the neighbourhoods. Following the norm of many urban Arab mosques, there will be open space for mingling around each religious centre. Gardens and the streets will also function as meeting points.

25. To counteract the level of segregation that is likely to occur in the neighbourhoods due to principle nr. 14, citywide meeting points should be established to encourage mixed cultural contact. This contact should not just be in the form of copresence, but rather as a habit of practice where people interact with each other, though not necessarily verbally. These citywide meeting places can come in the form of markets, theatres, stores, libraries, parks or different initiatives volunteer work such as might be encouraged by principle nr. 7.

26. Keeping in line with the norms of the Arab cities, all public services, such as those provided by the health centre, administration, market, schools and library, are to be kept open to all. This is important to establish and maintain, as tensions might run high in a city of persecuted and displaced people.

It is important to note that the economy of the city determines much of how successful the design will be, and though a system based on the continuance of the current system where each refugee receives a monthly allowance of 90€ is proposed, this system will need to be further explored before being implemented. It is expected that the city will continue to receive financial support by the EU and other donors, and that this will largely be equal to what Moria receives today.

The elements that will be included in the city are based on the design principles and the functions of the Moria camp today. These are presented in Figure 38.

Figure 38. Elements that will be included in the city.

	ELEMENT	NUMBER	STANDARD	COMMENT
	Short-stay halls	5	5000 peope capacity total 3 floors per hall 1200 m^2 hall footprint >3.5 m^2 space per person	Number estimates from the Red Cross and the UNHCR handbook For stays up to 5 days
	Long-stay houses	~2500	40 m^2 per apartment 4-6 people apartment 2-5 floors 30 m^2 garden area per apartment or 5 m^2 balcony and nearby public space	Architecture based on local norms Houses are lockable and include kitchen and bathroom facilities Different house shapes for different functions - some row houses, some apartment buildings, some with storefronts, etc.
	Neighbourhoods	150	~200 inhabitants in each neighbourhood 1 meeting point 1 garbage collection point	
	Garbage collection points	150	2000 litres per 200 persons per week	Number estimate from the UNHCR handbook Separated into four: - Biowaste - Plastic - Metal and glass - Residual waste
	Schools	6	1 playground per school	Number estimate from the UNHCR and Sphere handbooks Also to be used as a gathering place for people outside of school hours
	Religious centres	6		Number estimate from the UNHCR handbook Adoptable to any religion
	Churches	2		Existing churches that are kept, neither include a cemetery
	Rentable offices	100		Number estimated based on the need offices related to NGOs, administration and maintenance

	ELEMENT	NUMBER	STANDARD	COMMENT
	Health centre	1	55 inpatient beds 1 emergency obstetric and newborn care 115 skilled health personell 45 community health workers	Number estimates from the UNHCR and Sphere Handbooks Health care includes mental and psychosocial support Community health workers help provide initial health support, especially for marginalized people, and can consist of refugees, volunteers or locals with at least a minimum level of healthcare training
	Grocery stores	3	3 different Greek grocery store chains	
	Outdoors theatre		3000 m^2 area	Also to be used as a gathering place
	Library	1		
	Intercity bus station	1		Additional to an intracity bus line
	Cemetery	1		Number estimate from the UNHCR and Sphere handbooks Adoptable to any religion
	Play and sports area			Includes a 90 m^2 football court that can be divided into smaller courts Should also include space for other sports such as volleyball and basketball Playground space for younger and older children
	Market space			Accomodated for putting up tents and selling goods such as food and crafts
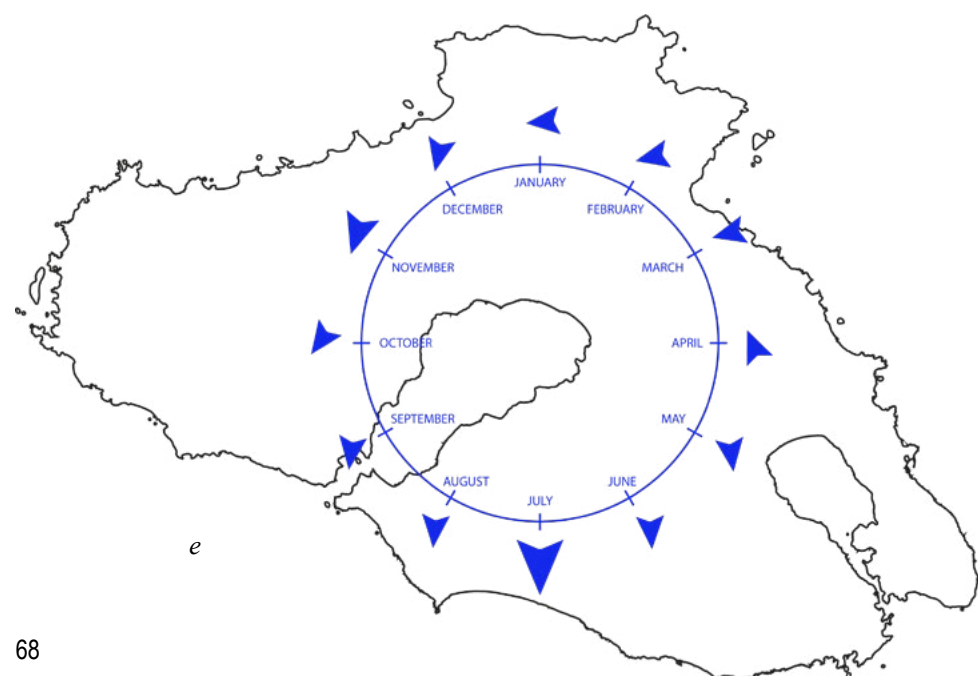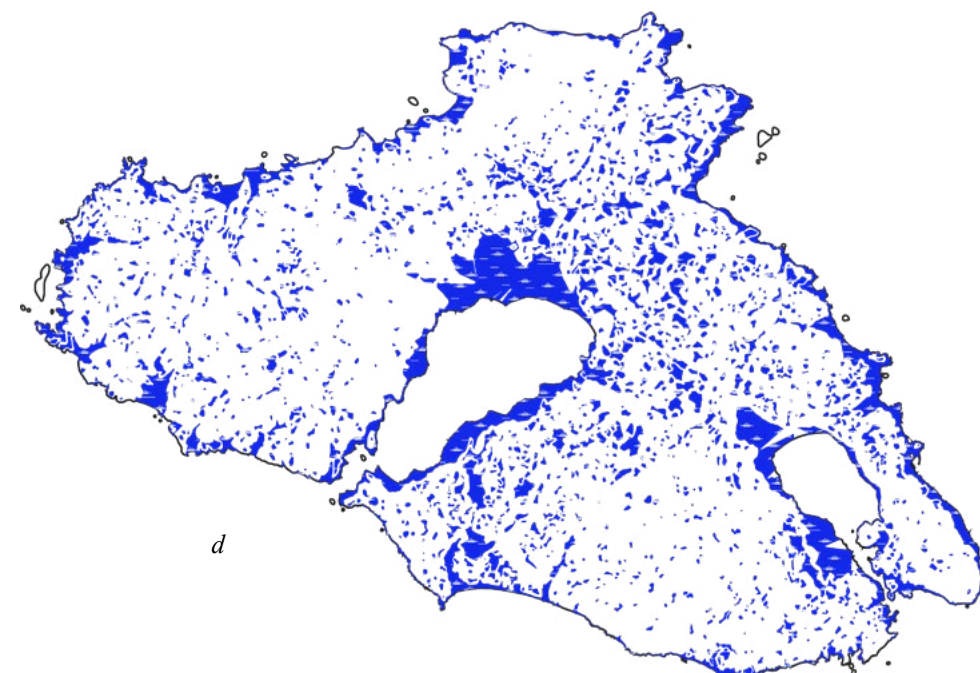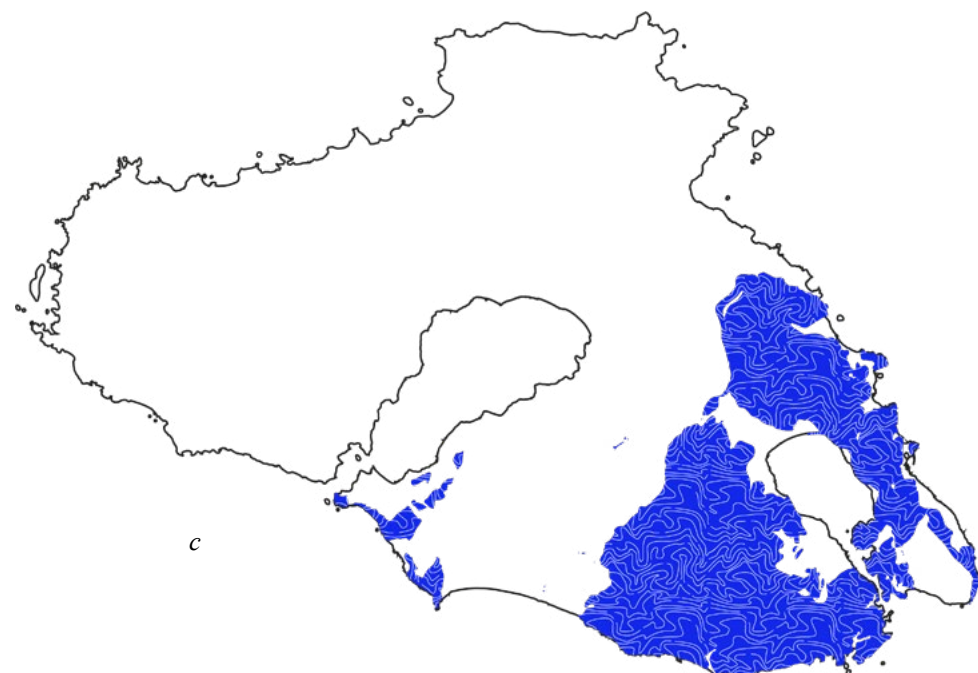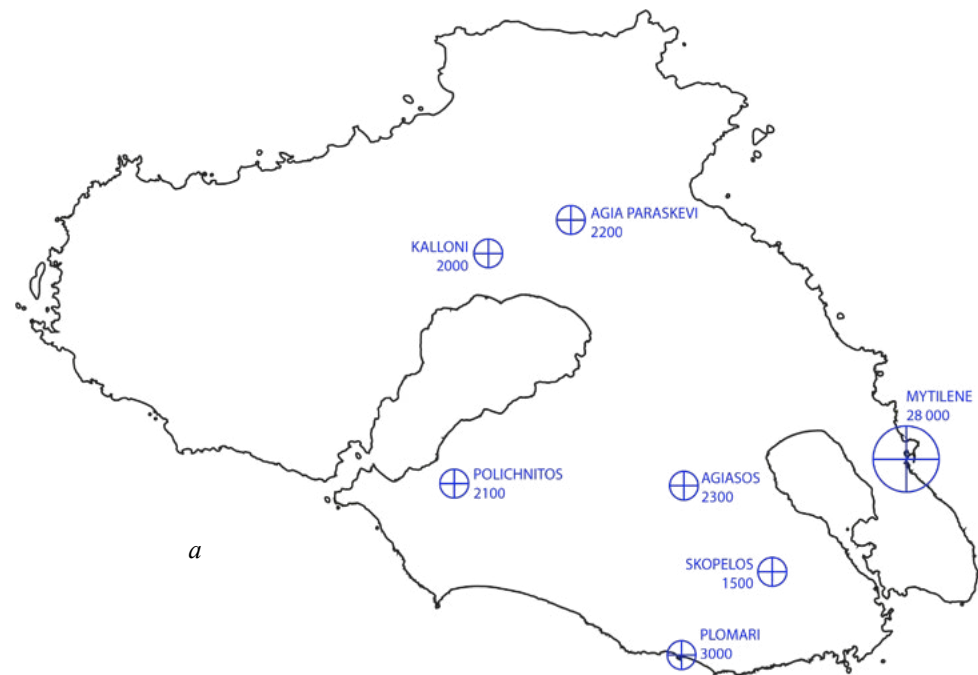
Figure 39. Maps of beneficial factors for constructing a city.
a - Proximity to a city with over 1500 inhabitants. The circle has a radius of 1 km to the city border.
b - Road network.
c - Metamorph bedrock in which to find groundwater.
d - Areas with a steepness of less than 10%.
e - Average wind directions through the year.

Figure 40. Topography, vegetation, infrastructure and social landscape of the southeast coast of Lesvos, (Next spread.)

PLACEMENT

The social landscape of the island is tightly connected to the geological landscape, as the metamorphic east is more densely populated than the volcanic west. This is something that needs to be taken into account when deciding on where the city should be located, especially in the context of trying to avoid what Agier (2002) described as "a life kept at distance from the ordinary social and political world" (p.320). Figure 39 marks the biggest cities (a) and main road network (b) of the island, as well as areas with metamorphic bedrock (c), which shows how they all accumulate in the east.

Drinking water is vital to support the population of a city, and is likely to be found in the east of the island in the form of freshwater aquifers such as well-fractured bedrock, limestone, or intrusive indigenous or metamorphic rock that can carry water (Earle, 2015). The water found should be of good quality for it to be used to drink (Kontis & Gaganis, 2012).

To avoid unnecessary planning obstacles the city should be located on a relatively flat area, while to avoid local climatic problems, such as strong winds, a further investigation of the local topography is needed. As can be seen in Figure 39, flat areas can typically be found along the coast. Because of this, along with the geological and social aspects of the southeast area of the island, the city should be built along the southeast coast. To make sure mainstream services such as shops, markets, and the airport and hospital in Mytilene are available to the refugees, the city should be placed no further than a 15 minute bus ride away from Mytilene.

PLACEMENT IN THE LOCAL LANDSCAPE

To decide on the exact location of the city, the area shown in Figure 40 is investigated and features of the landscape are identified. The orthophoto shows how the roads stretch through the area and congregate in villages and other settlements. Shops and harbours can be found in these urban patches.

Transit is available through the airport to the south and the bus station by the harbour in Mytilene. Areas of industrial activities such as car mechanics, the electricity plant, the sewage plant and stone quarries can be found to the west and north of Mytilene. Religious monuments in the area are marked with crosses as these are all connected to Christianity. Churches, mosques and cemeteries within Mytilene have been omitted because of their sheer number.

Steep slopes and valleys are marked in the figure, as are borders forming landscape rooms. The wide arrows highlight connections in the landscape, formed by valleys, roads or views. The thin arrows highlight views from viewpoints.

Vegetative elements such as agriculture and forests should be left largely undisturbed to preserve local identity, local economic income and recreational opportunities. To the south is a large forest covering ophiolitic bedrock where no settlements are established, most likely because of the density of the ophiolite. Patches of the same forest type can be found west of Mytilene and northwest of Pamfila.

Outside of the ophiolitic forests and the agricultural areas, there has traditionally been a vast production of olives that over thousands of years has transformed the area into an immense olive grove. Other than the age-old olive trees themselves, this cultivation has left traces in the landscape in the form of terraces, stone walls and rural paths. As the price of olives has fallen, many of these groves have been abandoned and become overgrown. However, the historical importance of the groves to the local landscape persist and the areas should therefore be preserved to the fullest degree possible. Other ruins in the landscape, such as the aqueduct south of Moria village and the ottoman bathhouses along the waterline north of Mytilene, should be preserved for the same reason.

Five blue circles each covering an area of 3 km² mark potential city sites in the area.

Site 1 – Pligoni – is a relatively rural area scattered with villas, gardens, churches and the occasional hotel by the coast. The proximity to the airport makes transportation to the mainland quick and easy but also offers regular noise for the inhabitants of the area. Though it is not densely populated, the mass expulsion that would need to come with establishing a city here would be devastating to the large number of current inhabitants.

Site 2 is situated west of Mytilene, in a largely flat and largely undeveloped area. Though not many live here, the site offers infrastructure in the form of road, electricity and pipe networks established in conjunction with the few villas scattered about, many of them left unfinished after the economic crisis of 2008. Because of its proximity to Mytilene, this area would be developed into a district of the existing city. This can create a conflict of identity for the inhabitants of Mytilene, potentially driving a deeper wedge between the refugees and those locals who already feel imposed upon. It should also be noted that the new city will need a number of administrative functions and meeting places and should therefore have its own city centre.

Infrastructure in the form of road, electricity and pipe networks is also found north of Mytilene, making site 3 a potential site for urban development. However, the area is also quite hilly, with several seasonal rivers, military grounds and the Kara Tepe refugee camp placed along the main road that crosses the area. The regional sewage treatment centre and the power plant which burns petrol to turn into electricity is also placed in this area, creating smells and fumes that are undesirable for a city. Additionally, establishing a city this closely connected to Mytilene can, similar to site 2, create a conflict of identity which could lead to further conflicts between locals and refugees.

The stretch of rural, flat land in the so-called Moria valley creates a cohesive room in the largely uninhabited landscape which makes site 4 a lucrative site for the creation of a city. The gentle slope combined with the seasonal Moria river and productive soil also makes it attractive for agriculture, and fields and olive groves stretch far along the coastline in the east and west into the hills. The Moria refugee camp is however placed near the valley, which can create undesirable associations for a city created in the same area and for the same people.

Site 5 is named after the promontory Akra Machaira, the sibling of the promontory of the castle of Mytilene. The area is separated from Pamfila to the south and the agricultural fields to the north by gentle hills and is covered in age-old olive groves from the coast to the east and beyond the main road to the west. Apart from a few farm buildings and villas, the only buildings in the area are two churches.

Though none of the sites are ideal, Akra Machaira offers the fewest handicaps for urban development. Gentle hills, olive groves and views both south and east from the promontory creates a scenic frame for development and appealing opportunities for establishing a city.

AIRPORT

AGRICULTURE

PANAGIOUDA

PANTELAS AGRICULTURE

TAMAKIOUDA RIVER

PITHA RIVER

SEASONAL RIVER?

ROCKY OPEN

GASCOOL PLANT

SEASONAL RIVER?

SEWERAGE PLANT

SEASONAL RIVER?

KALA TREE

Site 3. Mytilene north

OLD PORT

INDUSTRY

ELECTRICITY PLANT

OLD PORT

ROUKI OPEN AREA

CHURCH

CASTLE

BUS STATION

MYTILENE BRIDGE

MYTILENE

FOREST AND SHRUBS

VIEW POINT

VALLEY

VALLEY

HOSPITAL

VILLAS AND OLIVE GROVES

Site Petaloudon

AGRICULTURE FLATS

MORIA

Site 4. Moria valley

OVERGROWN OLIVE GROVES

LANDFILL

ALIFANTA OLIVE GROVES

Site 2. Mytilene west

OPHIOLITIC FOREST

HILLY AND PARTLY OVERGROWN OLIVE GROVES

Site 5. Nea Machiad.

MORIA CAMP

AIRPORT

INDUSTRY

BUILDING SINGLING PROCESS

PARTLY OVERGROWN OLIVE GROVES

LOUTRA

FOREST

Pirgi Thermis
Πύργοι Θέρμης

Church of St. Theodore

Church of St. John

Church of St. Thékla

Church of St. Nicholas

Niselia
Νησέλια

Akra Machaira
Άκρα Μαχαίρα

Church of St. Nicholas

Church of St. Lucas

Paralia Pámfylon
Παραλία Παμφίλων

Open-air theatre

Church of St. Barbara

Pamfila
Πάμφιλα

Church of St. John

Church of Jesus

Church of St. George

THE LANDSCAPE AND THE CITY

Akra Machaira is not at all unoccupied. The whole promontory is inhabited by tens of thousands of olive trees that have stood on the site for several generations. When trees die or a plot is cleared, new trees are planted in their stead with an 8-12 metre distance to each other. They are placed in lines that form grids following the slope of each plot. Ultimately, this creates a large pattern of trees neatly adjusted to the incline of the terrain and the conditions of the soil.

Young and old, the more than 20 000 trees can be seen in Figure 42 gently revealing the shape of the landscape. Wide roads, such as the main road south to Mytilene, cut through the area in unplanted lines and are very visible in the landscape. Other, smaller roads that line the promontory are less visible, as they trace in between the trees.

The churches of St. Nicholas by the coast and St. Luke in the olive grove are both beautiful to behold and difficult to find information on. Their exact age can't be found, though the architecture of St. Luke hints at Ottoman origins. The church is placed next to a tiny seasonal stream centred between the hills, and the inside is magnificently adorned with extensive paintings of biblical stories, some of which are shown in Figure 43.

The olive groves and the churches are both attractive elements full of local, cultural and religious history and need to be preserved in the urban design. This preservation should happen through looking at the elements as a framework that the design needs to be implemented into, in order for them to find their natural placement in the city.

Thus, structures such as streets and neighbourhoods are placed within the existing pattern of olive trees, individually laid out to preserve as many trees as possible. The alleys of olive trees this creates will help shade the streets and provide wind cover. Administrative functions and meeting places are located accordingly, while also considering the existing churches and their function in the urban landscape.

Figure 44 shows how the pattern of trees help form the urban structure. The streets are neatly rolled out in the spaces between the trees, and infrastructure, such as the electricity and pipe network, follow them in order to disturb the trees and their roots as little as possible. The buildings, accompanied by gardens, are then placed out according to the pattern formed by both the street network and the trees. Taking care at every turn, this will mean that less than 10% of the trees will need to be removed, leaving 18 000 to grow in the city.

Much of the urban design is thus decided by the landscape. Much also needs to be decided by the refugees themselves. The inhabitants of the city should be able and allowed to take a part in the urban life and affect their surroundings, both in the sense that their right to the city is respected, in the sense that material is available and useable, and spatially, meaning that one person's alterations is not done on behalf of his/her neighbour.

The gardens are largely meant to be a space for this, meaning that each group or family keep their garden as a private space that they can furnish and in other ways alter to their own need. This includes putting up fences and walls to shelter the garden from public view, which will likely suit many Muslim women well as their faith advises them to dress modest while in public. It is expected that the city *schwarzplan* eventually might look similar to that of Baghdad in Figure 16. Modest alterations can also be done to their houses, through e.g. paint, sunscreens or the use of vegetation.

Figure 43. The churches of Akra Machaira.
a - The beautiful Church of St. Luke placed in the middle
of an olive grove (Google; Grigoris Kardogiannis, 2019).
b - Inside St. Luke the walls are covered with paintings
(Google; Panagiotis Antonopoulos, 2019).
c - The Church of St. Nicholas by overlooking the coast
(Google; Athanasios T, 2020).

Figure 44. A section of Akra Machaira and a detailed
explanation of how the city design would be implemented
into it. (Next spread.)

After all this, when the refugee eventually leaves the city, measures need to be taken in order to make sure the refugee who moves into the apartment is not met with chaos. Therefore, an alteration of the Norwegian principle of "leave it how you found it" (DNT, s.a.) will need to be applied: leave the apartment how you would wish to find it. To make sure the principle is upheld, people employed in city maintenance will need to check the apartment before it is deemed okay to move into.

The inhabitants of the city will live in neighbourhoods following streets with names and numbers, as opposed to the blocks and sections applied by many humanitarian response standards, in order to create a more homely feel and a sense of unity. Each neighbourhood will have a meeting point with utilities such as bicycle parking and garbage collection.

As biking will be a main mode of transportation, the streets will be dimensioned for two-way bicycle transport and pedestrian traffic.

Registration, initial stay, offices, library and grocery stores are located in the city centre along the coast and the existing churches. The market where people can go to buy and sell goods such as homemade falafel or soup, is a central area where the olive trees provide shade and room definition. It will also take on the role of a public park, running from the coast to the church of St. Luke.
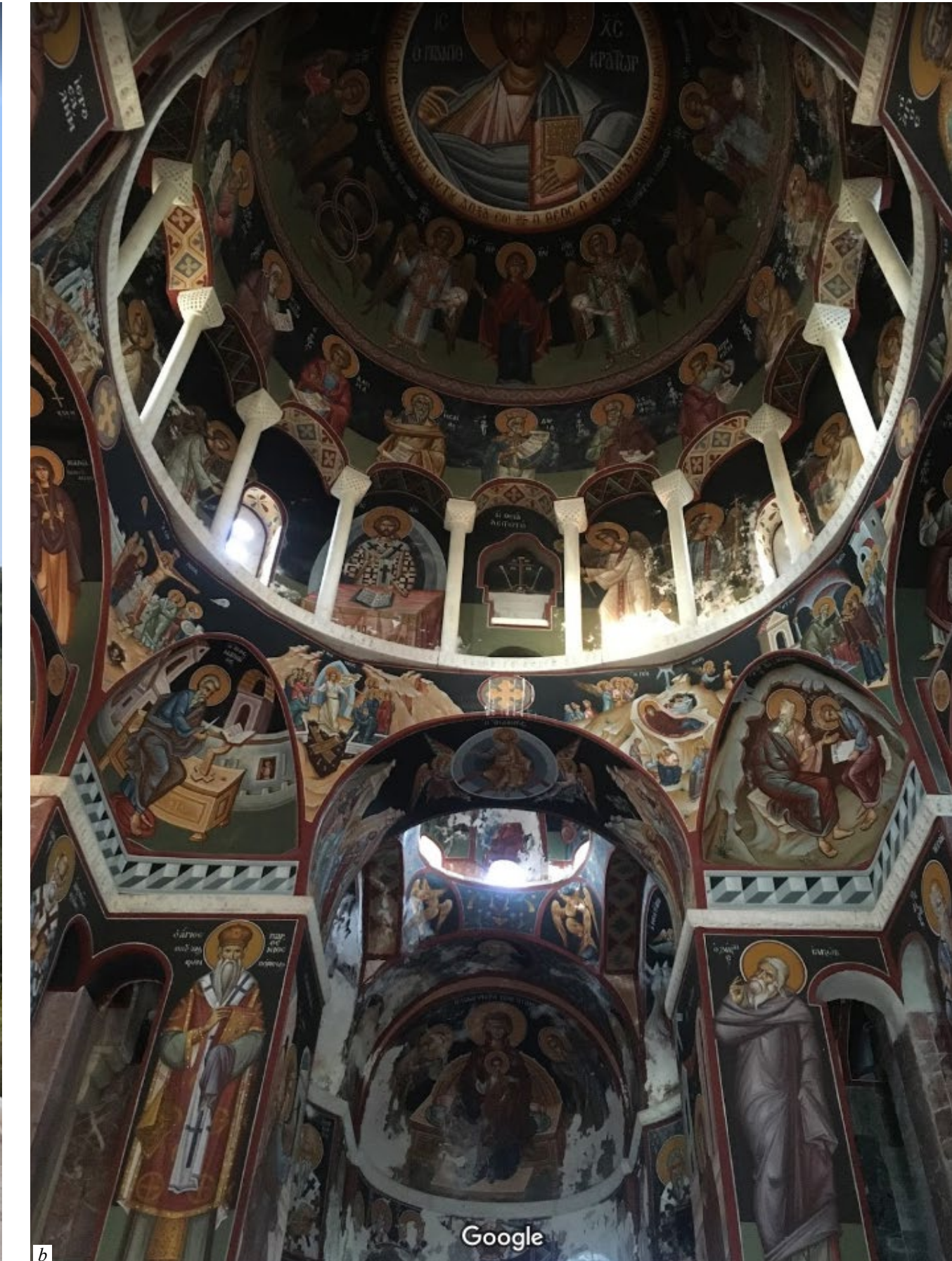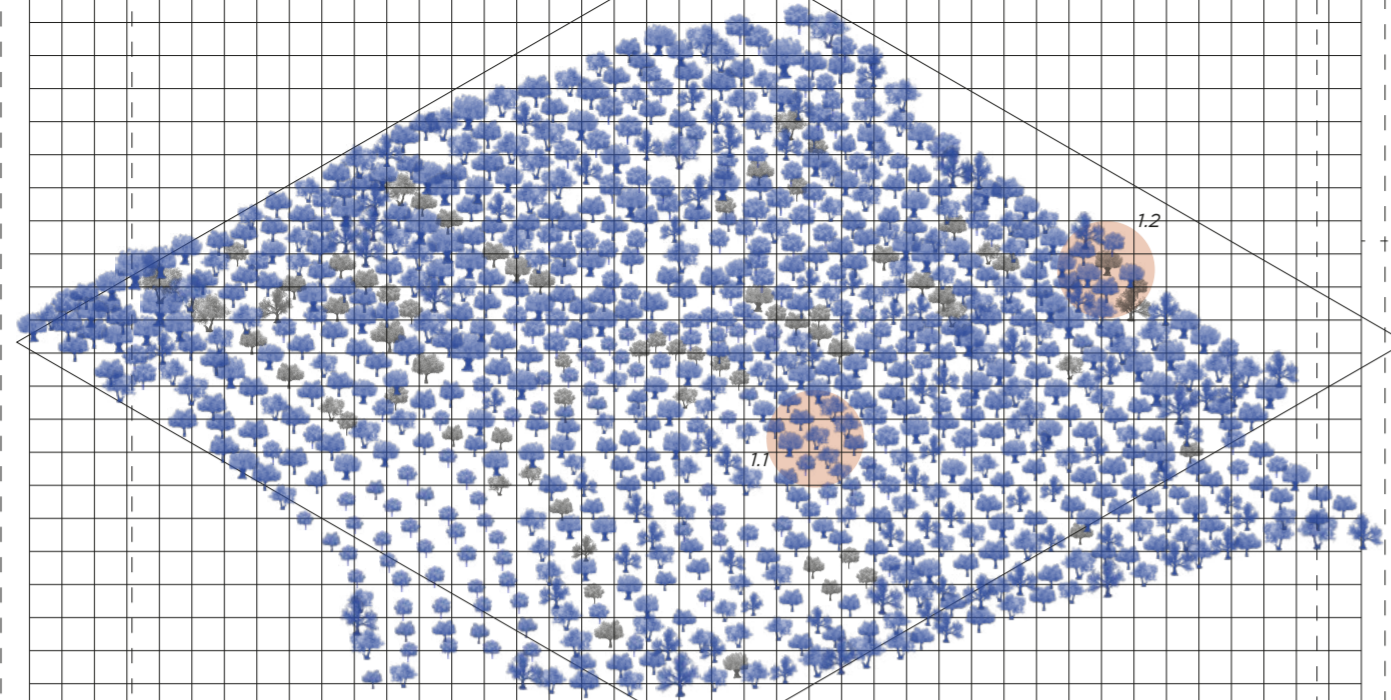
The existing olive trees provide a pattern which the city development adjusts to

Trees kept: 734

Trees removed: 69
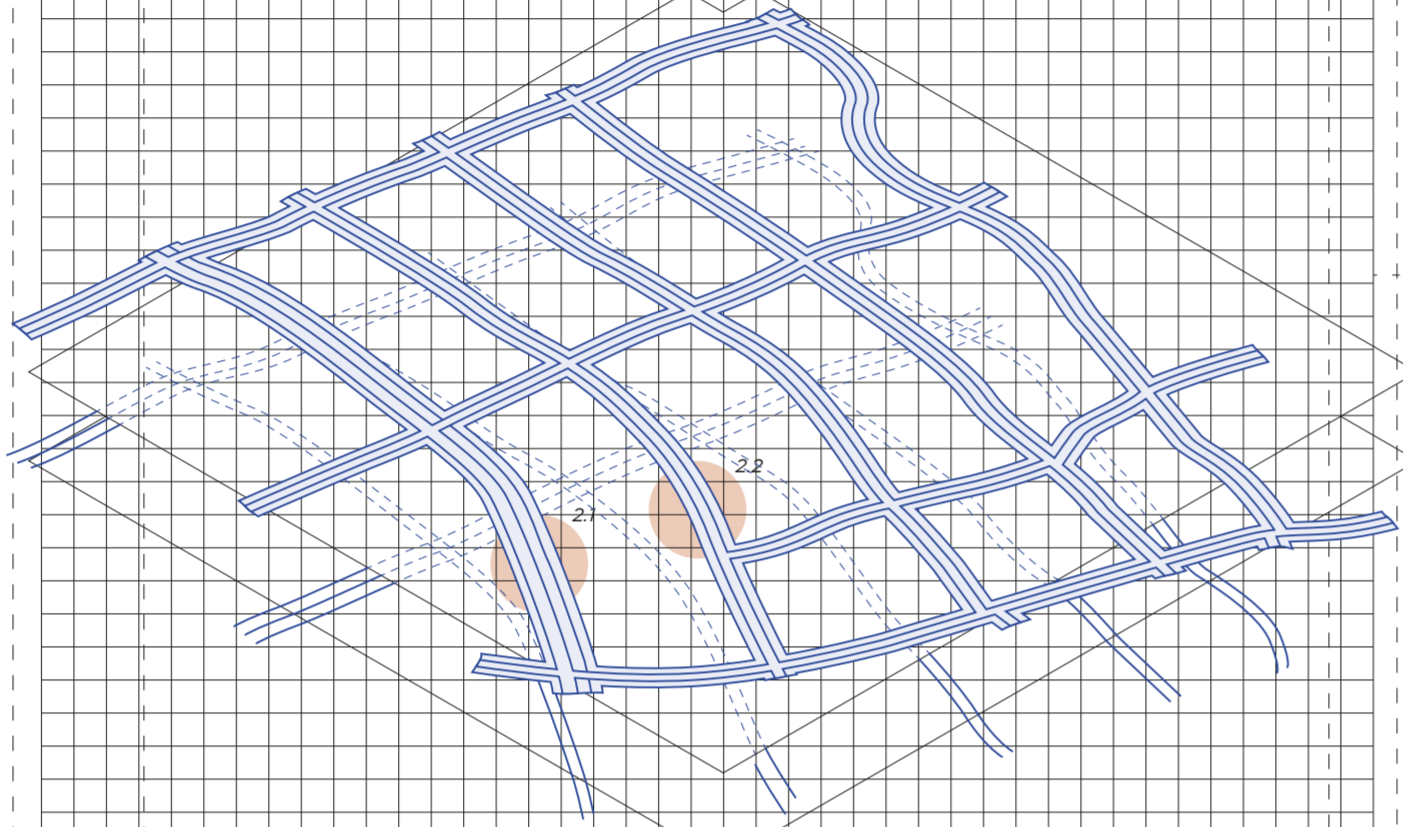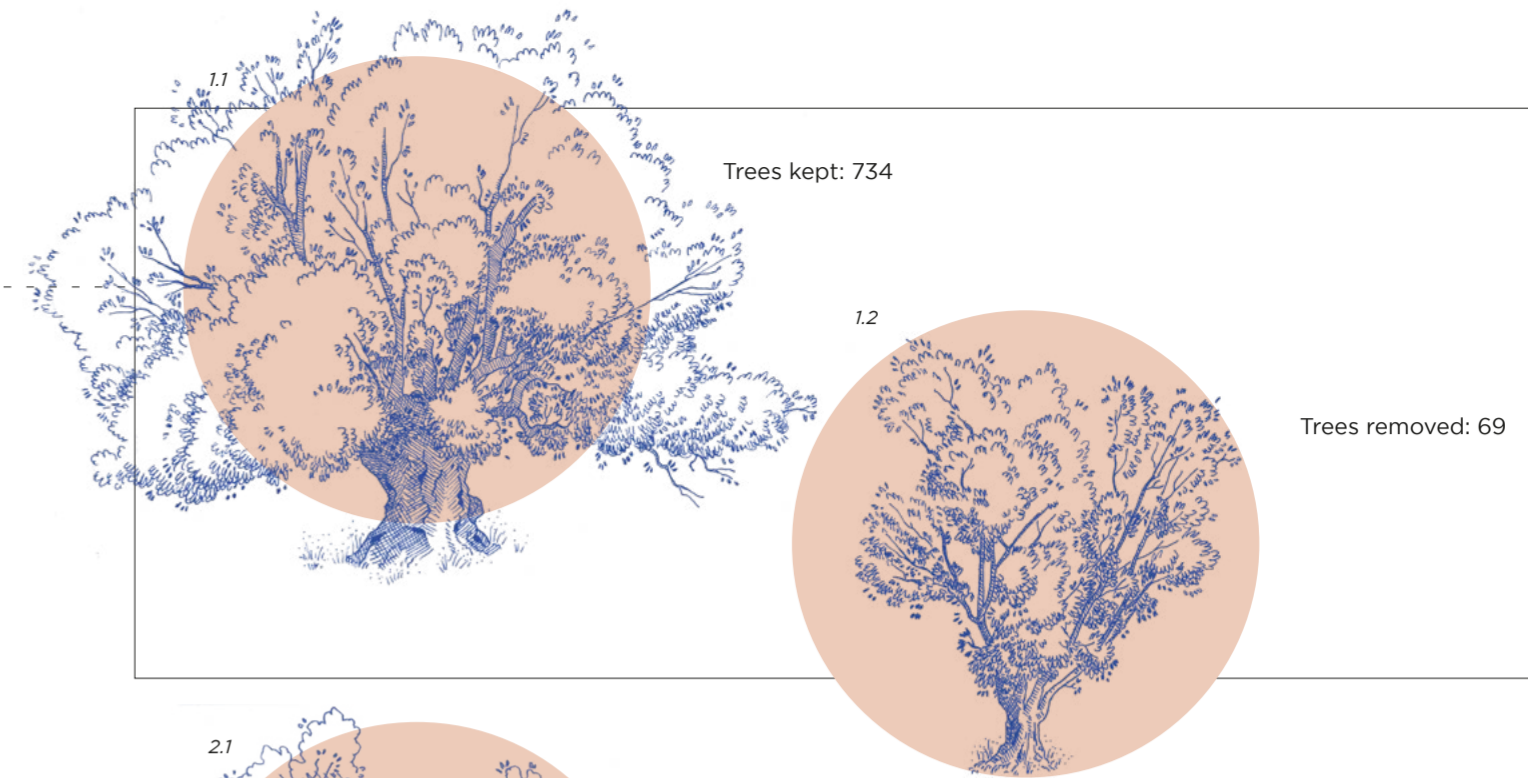
The street network follows the lines formed by the olive trees

The infrastructure network such as sewage, drinking water and electricity underlie the road network

The trees form alleys along the streets where pedestrians and cyclists are prioritized
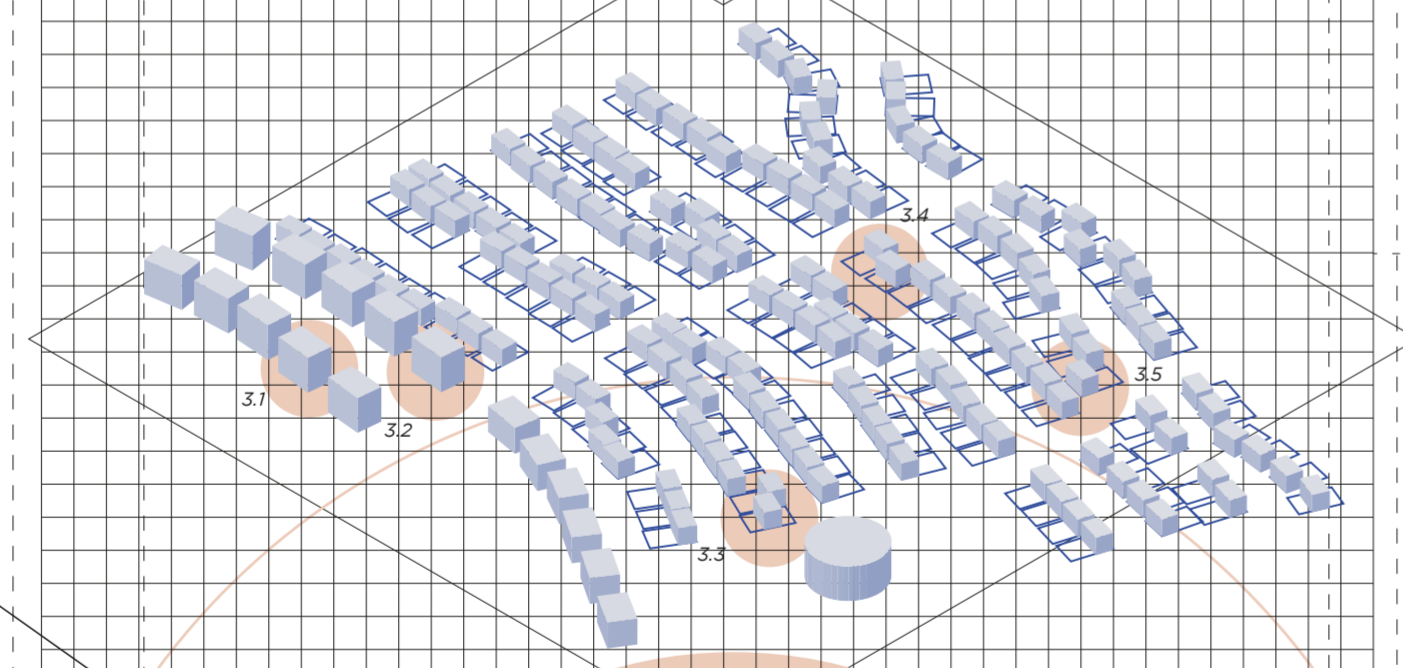
The buildings and their accompanying gardens face the street network and follow the olive tree pattern

The refugees are allowed and encouraged to physically alter their surroundings, their houses and their gardens

Houses with gardens
Religious centre
Apartment buildings
Street with bus lane
Area for market activities
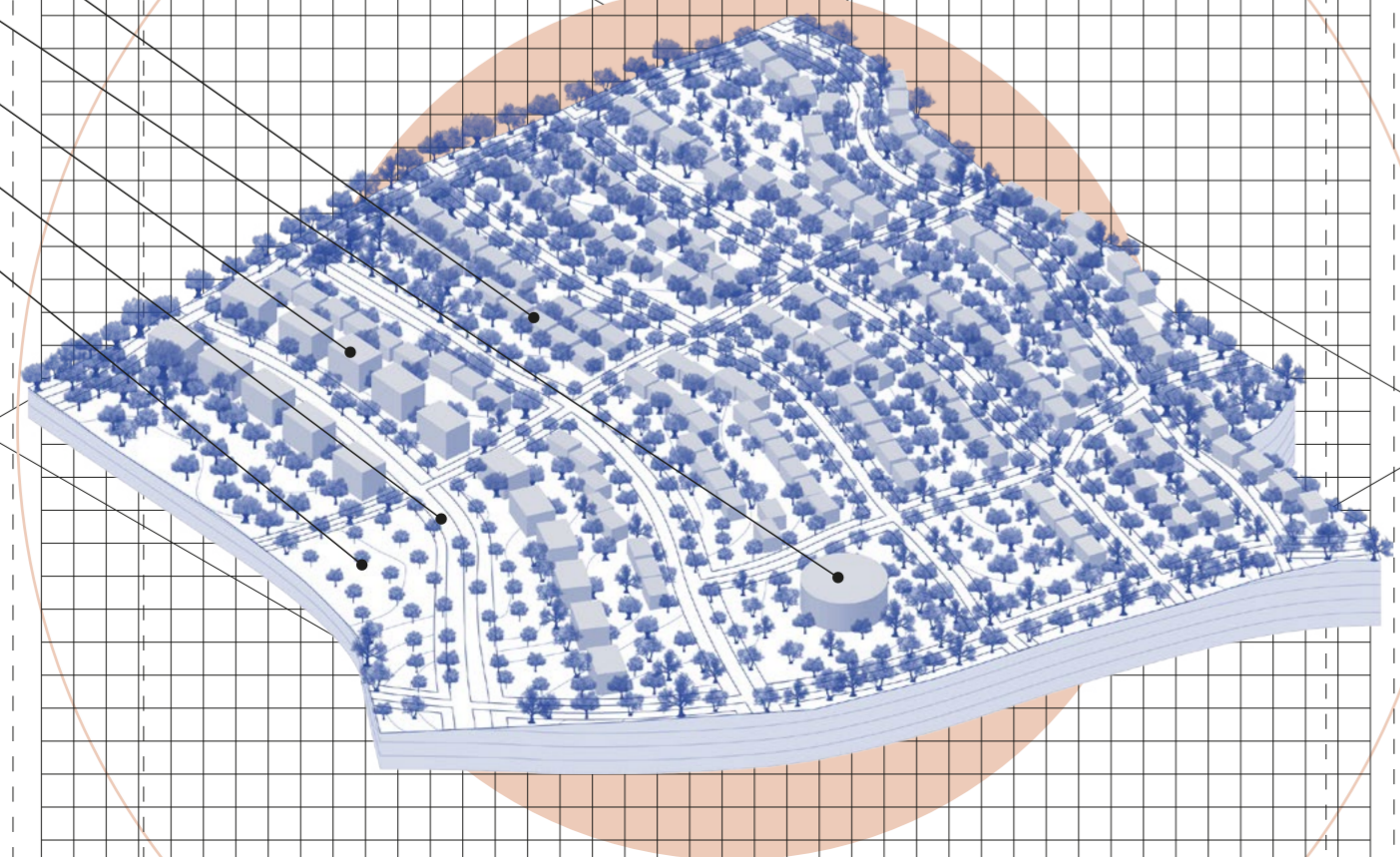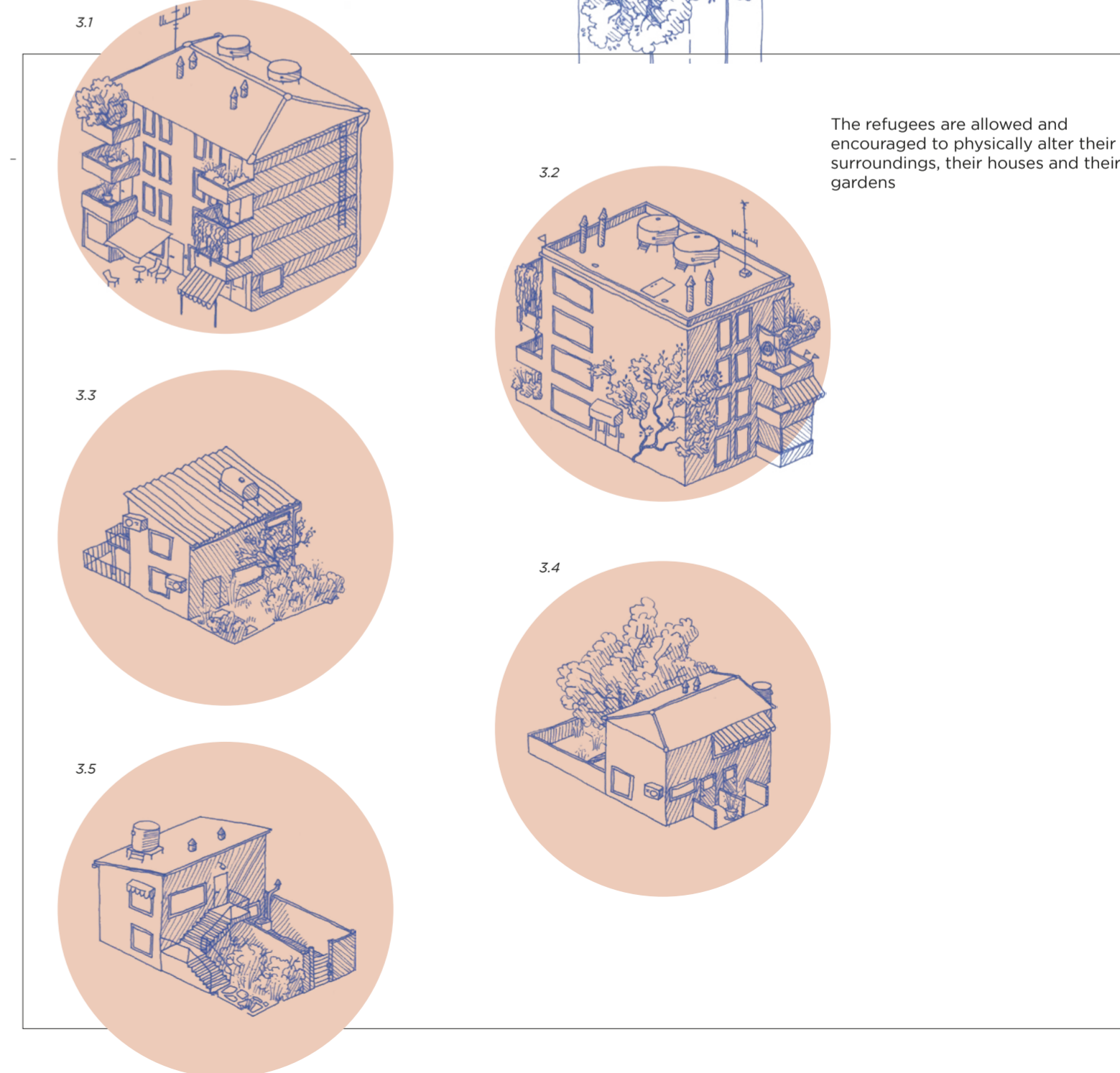
All construction is done to preserve as many olive trees as possible

0 m
50 m
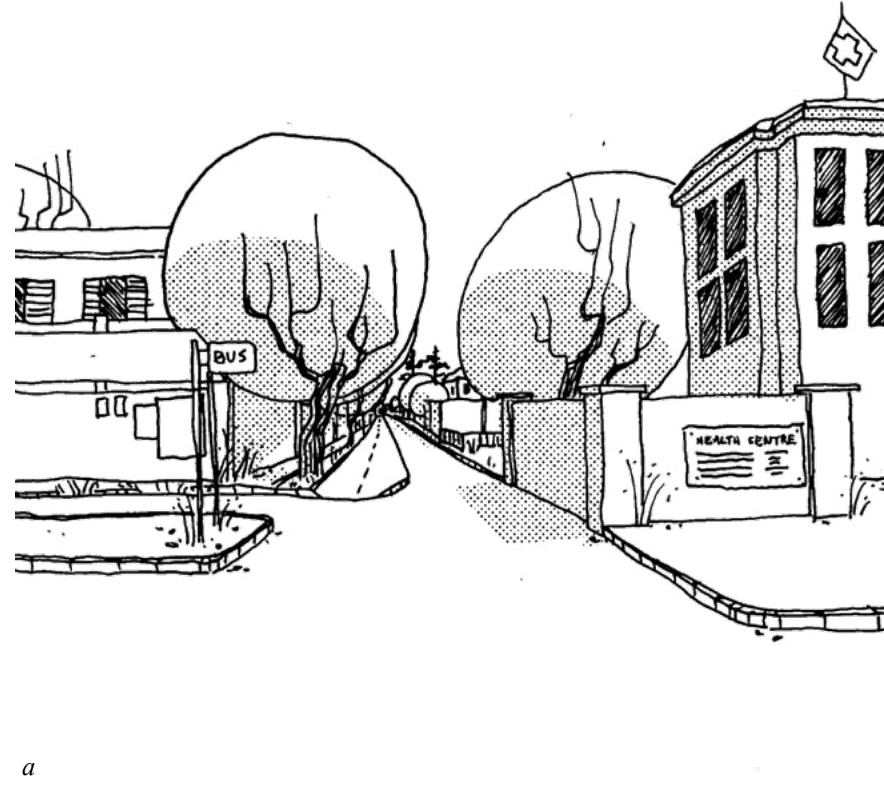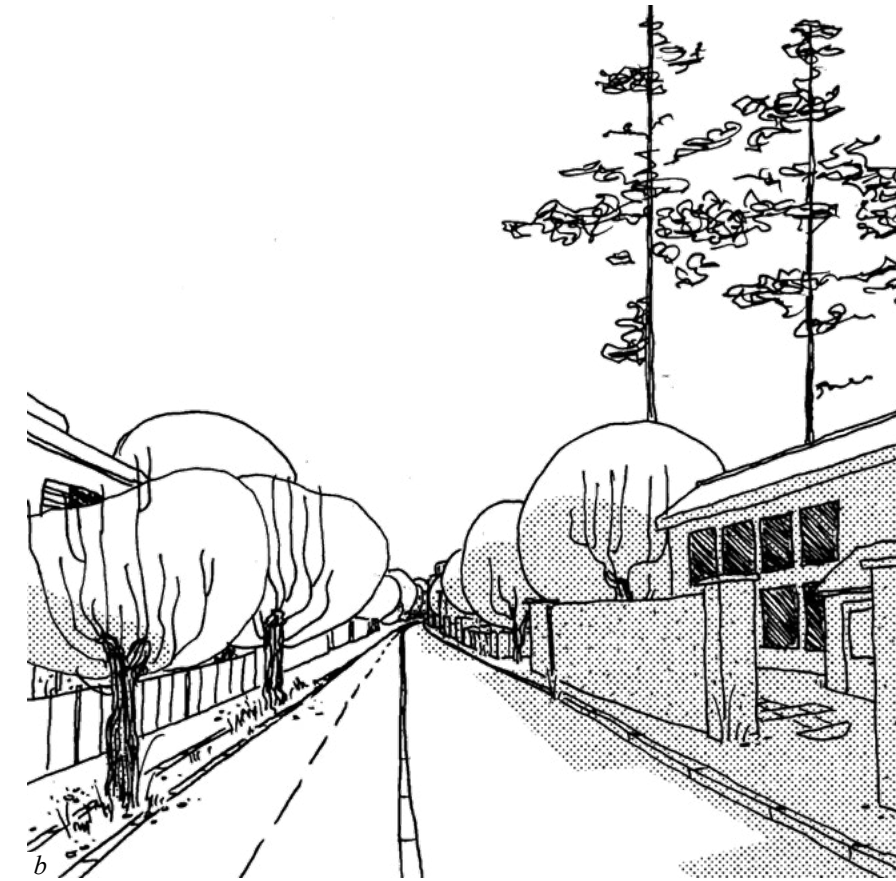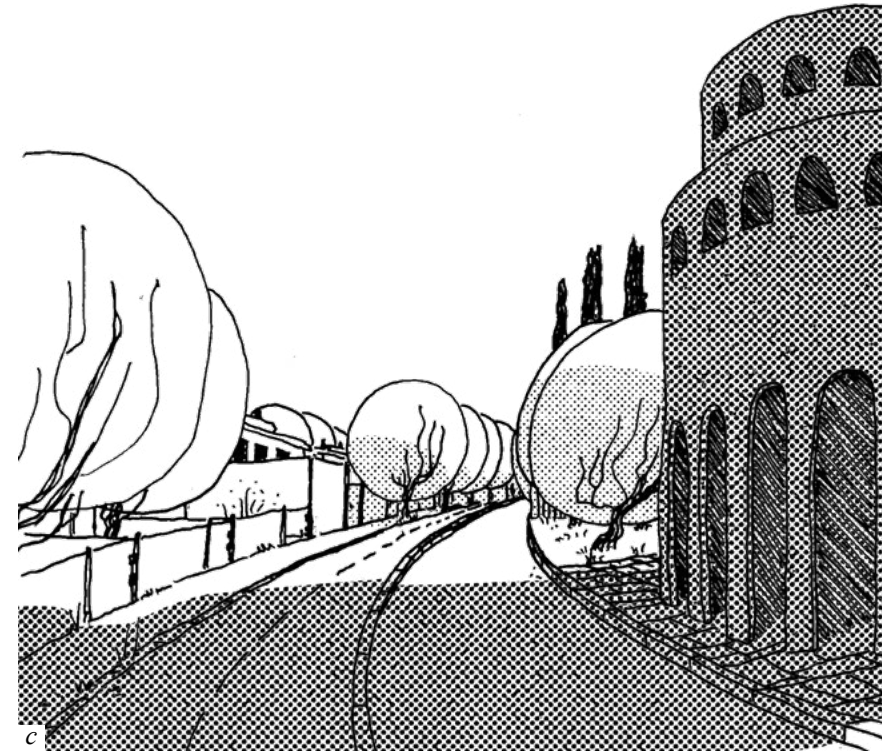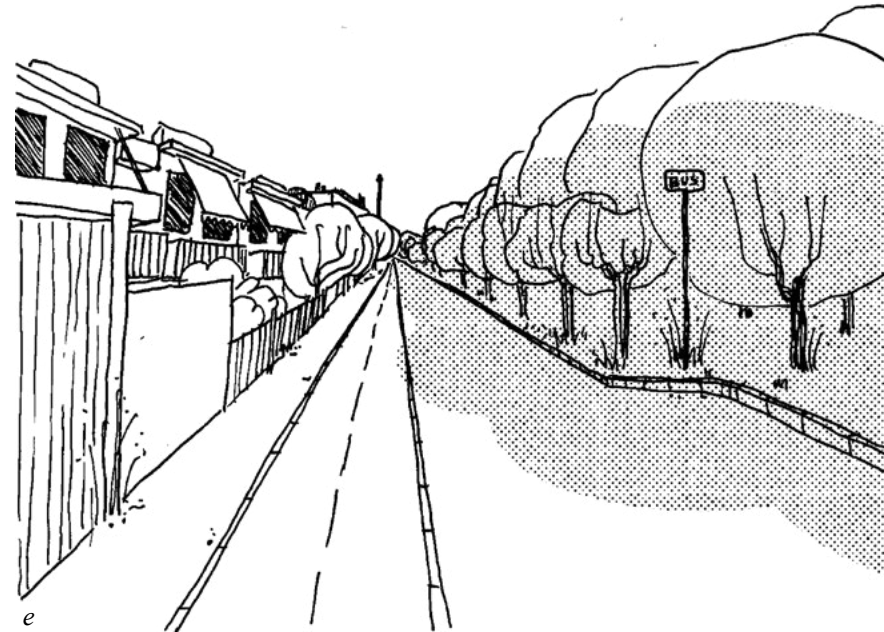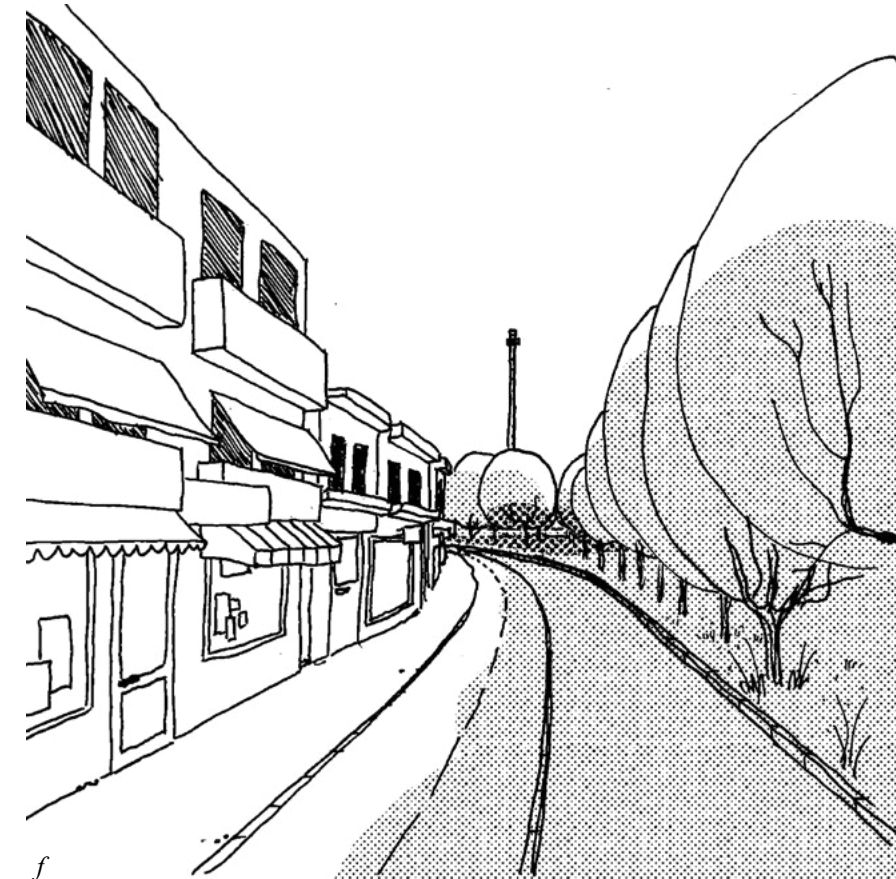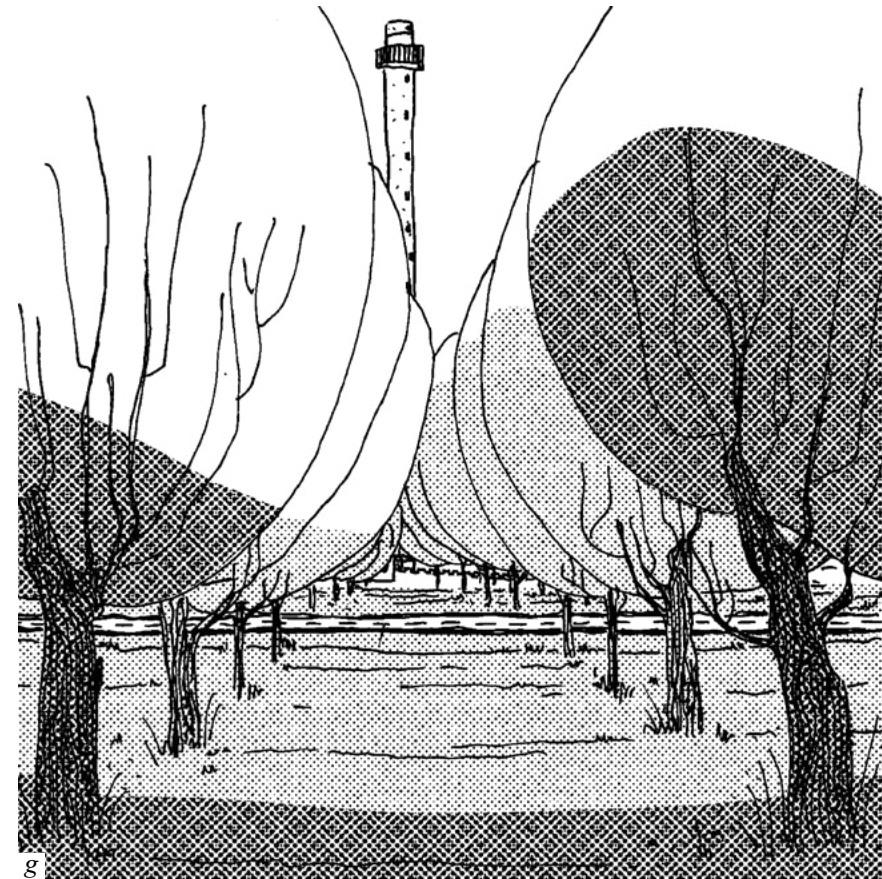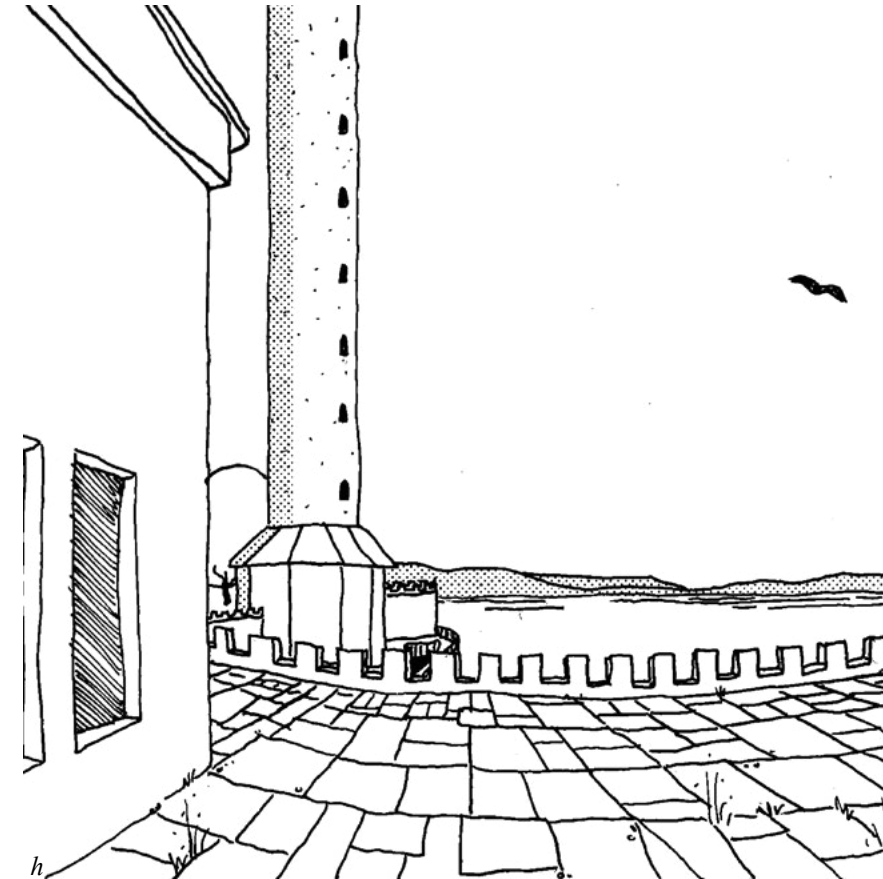
Figure 45. A series of views that will meet a person travelling through the city.
a - The bus station and the health centre.
b - A school on the right side of the road.
c - The religious centres are open to all.
d - Passing by the Church of St. Luke.
e - The market on the right side and the lighthouse in the distance.
f - Offices and services in the buildings on the left side.

g - Passing through the olive grove.
h - Reaching the harbour and seeing Turkey across the water.

The city design can be presented in many ways but wanting to abstain from the top-down view of so many refugee camps, it is in Figure 45 presented as a sequence of rooms.

To move from one part of the city to the next will provide a succession of impressions on the traveller. Here, the traveller is biking at a uniform pace, stopping every once in a while to sample the view ahead. Each space he passes leads to the next, as he travels from the health centre by the road to Mytilene towards the harbour by the coast.

In order to illustrate the city in its entirety, a painting, presented as Figure 46 on the next page, illustrates the holistic view. Without being anatomically correct to the landscape, the painting intends to show the life of the inhabitants of the city as well as the urban layout and how it stretches between the trees.

All the design principles, as well as the route of the aforementioned traveller and those elements that the frame allows to show, can be seen. By zooming in and out, the reader should be able to notice more and more details. The location of the different details on the canvas, together with supplementary descriptions where it is needed, are presented in Figure 47 on the following spread.

Figure 19. A holistic view of the city.

Figure 47. The details of the painting revealed.
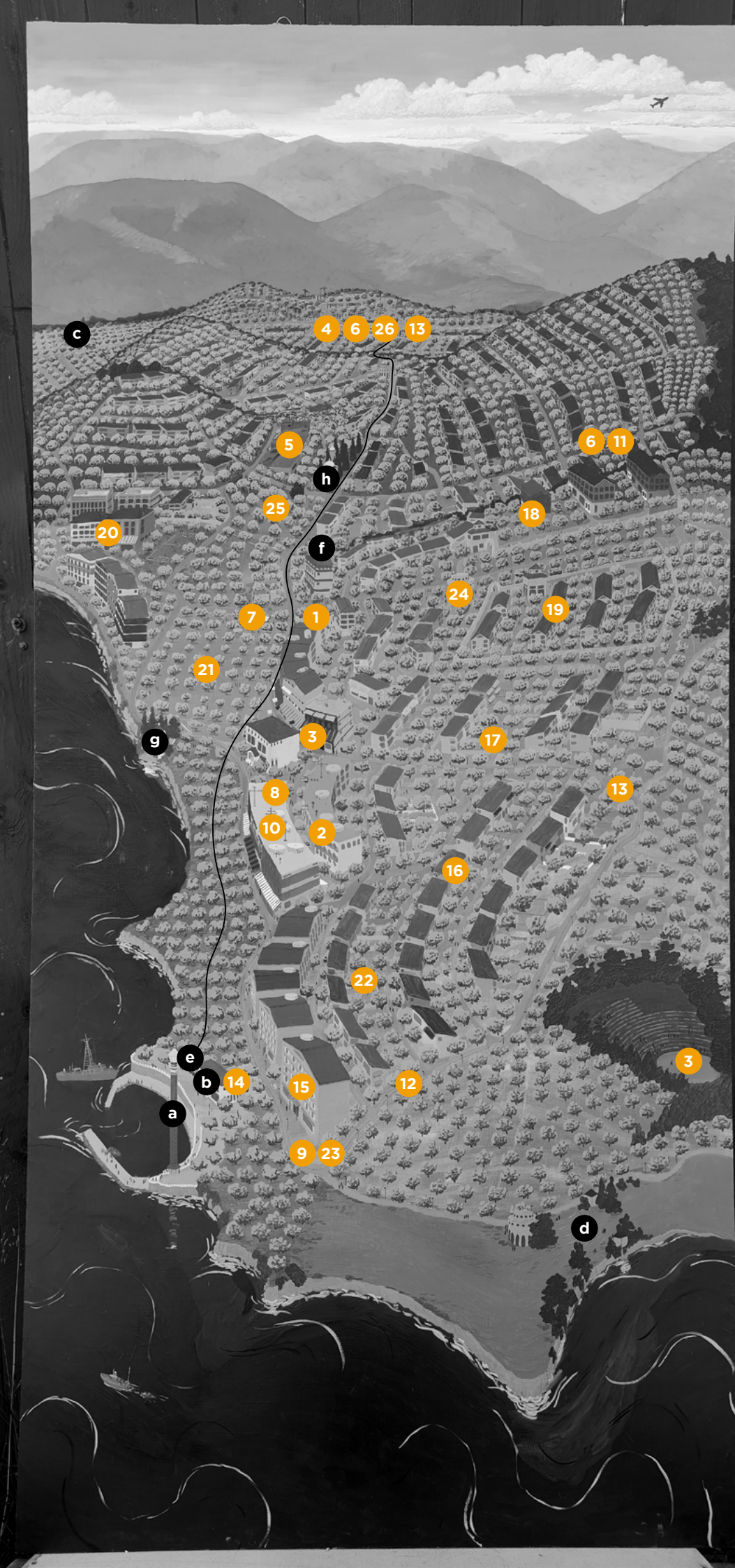
1. The city is divided into six districts, each of which will have an elected refugee representative. The six districts each have a school, which can be used for after-school meetings between the representative and the inhabitants of the districts.
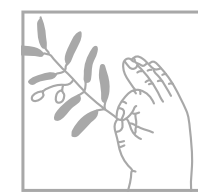
2. The Greek administration have their offices by the entrance to the city.

3. Some NGOs repair bikes while others entertain children by playing theatres.
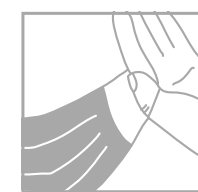
4. The health centre is placed by the main road to Mytilene, to ensure quick transfer to the local hospital in case of an emergency that it is unequipped for.

5. Centrally placed grocery stores.
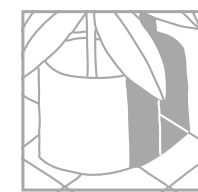
6. The locals are important to the city, as they contribute to maintenance and in making the city an economical part of the island.
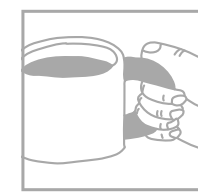
7. A refugee-run market in the city centre.
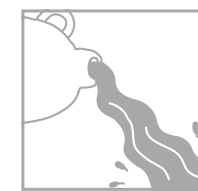
8. Hot water tanks on the roof tops.

9. Streetlights follow the road.
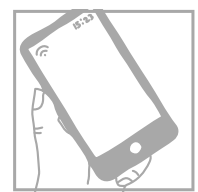
10. An internet cafe.
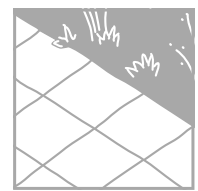
11. A garbage truck driving through the neighbourhoods.

12. The streets form a grid that is easy to navigate and that the neighbourhoods follow. The trees form alleys on both sides.
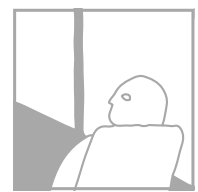
13. There is a one-way bus route through the city, running from the health centre by the main road, past the Church of St. Nicholas, the market, the harbour, the sports area, the grocery stores and a number of neighbourhoods before circling back to the health centre. This provides quick and easy access to a number of central functions within the city, most notably the health centre, while keeping the bus station by the main road ensures bus correspondence to other nearby villages and cities such as Mytilene.
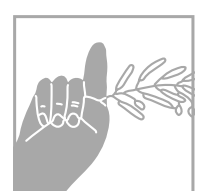
14. Vacant apartments can be moved into by newcomers.

15. The five halls that will provide the initial stay.

16. Each two-storey house is shared by two groups or families and built following local architecture.
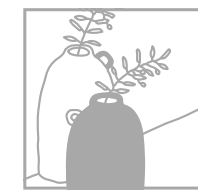
17. The gardens are free to be altered as each family or group wishes. This can make it easier, especially for Muslim women, to use the space freely.
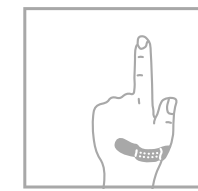
18. Children are playing in the treetops in the minors area.

19. Women are mingling in their shared outdoor space.
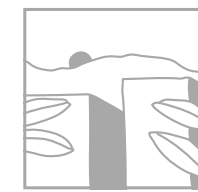
20. Similar to Mytilene, the buildings are taller around the centre and the harbour than westward into the hills. Colours used to paint the buildings should be similar to those used in other villages or cities on Lesvos.
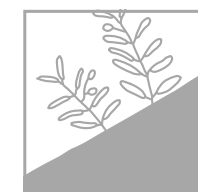
21. Over 90% of the existing olive trees are preserved, meaning there are more than 18 000 trees in the city.
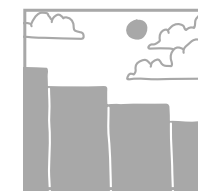
22. Private space, such as the gardens, are to be used by each family or group as they wish.
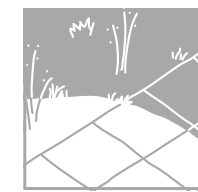
23. A stable power source is important to keep the streetlights on during the night.

24. People of different faiths will meet around the religious centres, as these are to be universally adopted. Neighbours might also meet on the street.
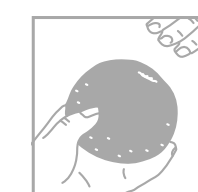
25. As the grocery stores are the main providers of food and goods to the refugees, the area around the stores will be busy. They are placed next to the Church of St. Nicholas and near the market, ensuring that this becomes a natural centre of the city and will have regular traffic. The Church of St. Nicholas will thus find itself in the middle of a city, instead of in the middle of a grove. The coast is kept public, making it an extension of the market and the park.

26. The health centre is open and available to all.

a. As Turkey can be seen from the city, the city should also be seen from Turkey. A lighthouse by the harbour provides a clear mark of light to navigate by for those who have not yet reached the city.

b. The city will welcome and register all refugees as they arrive to Greece and the EU from Turkey. The harbour is kept open and is easy to navigate in order to accommodate for this purpose.

c. To keep the thousands of olive trees maintained, an olive oil production company run by locals with knowledge on olive maintenance and harvest is situated near the city, tasked with the responsibility of keeping the trees in the city groomed. Refugees can volunteer to work for the company and help harvest the fruit.

d. The graveyard needs to be universally fitted for all religions.

e. The route of the traveller in Figure 45.

f. The section of the city shown in Figure 44 is partly hidden behind the foot of the hill, but the religious centre is visible.

g. The Church of St. Nicholas.

h. The Church of St. Luke.

Figure 48. a - Refugees that have been picked up by the coast guard.
b - The harbour.
c - The Church of St. Nicholas.
d - The football pitch.
e - The Church of St. Luke.
f - An airplane leaving the island.

Panel 6. In an alternative ending to the story, the refugees arrive in the city in stead of Moria.

ACCOMPLISHMENTS OF THE CITY

Planning and establishing urban spaces for the specific user group of refugees allows for safe and social meeting between the multitude of groups that are represented in the Moria refugee camp on Lesvos today. Coupled with a far lower population density than that of the camp, this can help reduce the social tensions between the groups, as well as removing many serious health hazards that the refugees experience today. As a result, these interventions can allow for the formation of habits of practice and a sense of everyday life, possibly leading to a life similar to that shown in Figure 48.

In addition to greatly improving the living conditions for all refugees who might find themselves travelling through Lesvos, establishing a city like what is presented here will also minimize the damage done to the local landscape through chopping down trees, polluting the water and releasing fumes into the air by burning plastic, such as is done in Moria today. Taking extra care to implement the city into the existing landscape will help preserve as many as 90% of the existing trees, while also creating interesting, unique public spaces.

The construction and maintenance of a city will create a new job market for the locals to participate in, and thus contribute to the economy on Lesvos in a way that the camp today does not. Thus, a city for refugees will have both social, environmental and economic benefits to that of a camp.

EXPLORING THE UNEXPLORED

There are a multitude of interesting aspects to explore in such a project as this, but with limited time and resources some aspects unfortunately have to be omitted. In another project, looking into the unexplored aspects or the assumptions that build up the framework for this project could help refine the arguments for creating an alternative to the existing camp.

The main focus of this project has been on the different cultural groups of refugees and their social relationship to each other, without any specific focus on any one group represented in the Moria camp. Looking into the issues some of these specific groups face could be vital to ensure their health and security. This includes aspects connected to

- children's and minor's rights and wellbeing, as almost 35% of the camp population are minors.

- women's rights and wellbeing, as over 20% of the camp population are women. The focus on gender roles and expectations connected to the different religions represented in the camp would be necessary to explore in order to accommodate for suitable spaces for women.

- LGBTQ refugees' rights and wellbeing.

- the relationship between refugees and local islanders. This could be especially interesting to explore with a focus on tourism.

The expectations of the presented urban design play a big role for the functionality of the city and looking at them from a different angle would be necessary to make the design more robust. Most notably is perhaps the financial system of the city, which is only glanced at and is very similar to the concept of civil wages. Because of the political assumptions that come with this, it could be interesting and useful to find alternatives to this solution. Additionally, the flow of refugees could vary, and exploring how the city would react to these changes could make them easier to anticipate and meet. This includes, but is not limited to scenarios where

- the refugees stop coming to Europe.

- the refugee flow increases beyond imagination.

- the refugee flow changes direction, travelling from Europe to East Asia or North Africa.

Any urban design explored for the use of refugees could also benefit from looking into

- the step-by-step evolution from a camp to a city.

- the possibility of designing multiple villages, as opposed to one city.

Exploring these unexplored aspects would help strengthen both the argument for establishing a city for refugees and the argument for looking at alternatives to the widely accepted use of camps as adequate refugee spaces today.

NEWS STORIES FROM MORIA IN 2020

Situations arise and fade every day in the Moria camp, making it alive with constant development and an area it is very difficult to get an oversight over. In an attempt to follow the progress, I have paid attention to news reports from Moria this year. More than anything this has proved that predicting the development of the camp is futile. As an area of much international interest, media reporters do a good job of covering the situations in the camp and on the island. A selection of news stories from renowned international news agencies are presented in this attachment.

The beginning of the year has seen protests by locals on Lesvos and mainland Greeks who were concerned with the overcrowded refugee camps on the island and the other Aegean islands. As the Greek government have revealed plans for establishing new camps on Lesvos in February, the local protests continued and, in some cases, turned violent as islanders have tried preventing access to construction sites and have clashed with the police. However, with the spread of COVID-19 in March both plans and protests have been put on hold. International media have become more concerned for refugee health, fearing the spread of the virus as the population density of Moria doesn't allow for social distancing. As the camp has gone into lockdown there have been no refugees entering nor leaving, and tensions within the camp have risen over the spring and lead to violence between refugees and between refugees and locals. At the same time the solidarity of the international world has led to several European countries being more open to receiving refugees from Moria, especially minors, from April and onwards. This has led to a small number of refugees being moved from the island. The lockdown is still in effect today.

GREEK ISLAND RESIDENTS PROTEST OVER MIGRANT CAMPS AND CONDITIONS

22. January 2020 | Reuters

Residents of Greek islands struggling with a resurgence in migrant arrivals protested on Wednesday about overcrowded refugee camps and government plans to replace them with detention centers.

GREECE WANTS FLOATING FENCE TO KEEP MIGRANTS OUT

30. January 2020 | Reuters

Greece wants to install a floating barrier in the Aegean Sea to deter migrants arriving at its islands' shores through Turkey, government officials said on Thursday.

LESBOS: TEAR GAS FIRED AS MIGRANTS HOLD PROTEST OVER CONDITIONS

3. February 2020 | BBC

Greek police have used tear gas to break up protests by migrants over living conditions on the Greek island of Lesbos.

GREECE TO START SETTING UP CLOSED MIGRANT CAMPS

10. February 2020 | Al Jazeera

Up to 20,000 migrants will be locked in overnight at the new camps, due to open by mid-2020.

IN NIGHT OF VIOLENCE, GREEKS TRY TO BLOCK ACCESS TO MIGRANT CAMP BUILDING SITES

25. February 2020 | Reuters

Police in riot gear threw teargas and fired water cannon at Greek islanders as they tried to prevent access to construction sites for new migrant detention centers by setting fires, hurling flares and blockading the gates.

GREEK ISLANDERS STRIKE OVER NEW MIGRANT CAMPS, GOVERNMENT SAYS NO ALTERNATIVE

27. February 2020 | Reuters

Greek island residents went on strike for a second day on Thursday, stepping up protests against government plans for new migrant camps on five islands after violent clashes with police.

SYRIA WAR: TURKEY LETS REFUGEES EXIT TOWARDS EUROPE

28. February 2020 | BBC

Groups of refugees and migrants are heading towards the EU after Turkey said it would not abide by a deal to stop them reaching Europe.

ISLANDERS ON LESBOS BLOCK CAMP AND PORT AS REFUGEE ARRIVALS SPIKE

1. March 2020 | Al Jazeera

By Sunday evening, more than 500 people arrived on Greece's eastern Aegean islands of Samos, Chios and Lesbos.

TURKEY SAYS MILLIONS OF MIGRANTS MAY HEAD TO EU

2. March 2020 | BBC

The Turkish president has warned that "millions" of migrants and refugees will soon head towards Europe.

CHILD DIES AS BOAT CARRYING MIGRANTS CAPSIZES OFF LESBOS

2. March 2020 | Al Jazeera

Another child in hospital, 46 others rescued after makeshift boat packed with dozens of refugees and migrants capsizes.

LESBOS CORONAVIRUS CASE SPARKS FEARS FOR REFUGEE CAMP

11. March 2020 | The Guardian

Wave of anti-migrant violence has left refugees without food and medical care – and more vulnerable to disease than ever before.

EVACUATION OF SQUALID GREEK CAMPS MORE URGENT THAN EVER OVER COVID-19 FEARS

12. March 2020 | MSF

The overcrowded and horrific living conditions in the camps - or 'hotspots' - on the Greek islands provide the perfect storm for a COVID-19 outbreak, warned Médecins Sans Frontières (MSF).

AFGHAN 16-YEAR OLD STABBED TO DEATH IN MORIA

8. April 2020 | Stonisi

Fierce clashes today between minors, 4 were taken to hospital.

NEARLY 1,000 VULNERABLE MIGRANTS TO BE TRANSFERRED TO HOTELS IN GREECE

15. April 2020 | InfoMigrants

EU Commissioner for Home Affairs Ylva Johansson announced on Tuesday that nearly 1,000 of Greece's most vulnerable migrants would be transferred to empty hotels in order to ease pressure on the overcrowded migrant camps.

PANDEMIC PUSHES HARDER GREEK REFUGEE POLICY, BUT ALSO SOLIDARITY

21. April 2020 | Al Jazeera

Coronavirus has been a catalyst for European countries offering to take in migrants who have been stuck in Greek camps.

GREEK MAN WHO SHOT AT REFUGEES ACCUSED OF ATTEMPTED MURDER

27. April 2020 | Al Jazeera

Man, 55, on Lesbos island says he believed men he shot at had trespassed on his property and claims he acted in defence.

GREECE: FIRST CASES OF CORONAVIRUS AMONG MIGRANTS ON LESBOS

13. April 2020 | InfoMigrants

Two migrants who arrived on Greece's eastern island of Lesbos have tested positive for the novel coronavirus. Officials say they have had no contact with migrant camps on the island.

FRANCE TO RELOCATE 750 MIGRANTS FROM GREECE

27. May 2020 | InfoMigrants

France has announced it will take in some 750 asylum seekers, including 350 unaccompanied minors, from Greece. The first transfers are expected to take place in July.

DUTCH GOVERNMENT UNDER GROWING PRESSURE TO TAKE IN CHILD REFUGEES

21. June 2020 | The Guardian

Protests call for coalition to admit 500 unaccompanied minors from Greek islands.

MORIA STABBING BLAMED ON CONDITIONS IN MIGRANT CAMP

7. July 2020 | InfoMigrants

In the Moria camp on the island of Lesbos a young man has died after he was stabbed during a fight. The medical charity MSF says conditions in the migrant camp created the 'perfect storm' for violence.

GREEK GOVERNMENT MUST END LOCKDOWN FOR LOCKED UP PEOPLE ON GREEK ISLANDS

16. July 2020 | MSF

COVID-19-related lockdown measures have had an impact on the lives of everyone around the world and generated increasing levels of stress and anxiety for many of us. However, the restriction of movement imposed in places like Moria and Vathy, on the Greek islands, have proven to be toxic for the thousands of people contained there.

REFUGEES ARRIVE IN ROME FROM LESBOS ON POPE'S INITIATIVE

20. July 2020 | InfoMigrants

Ten Afghans arrived in Rome from the Greek island of Lesbos last week. They are the first refugees to arrive in Italy via a humanitarian corridor after the COVID-19 lockdown.

RESEARCHING ANCIENT HELLENISTIC POTTERY

History is not only past events, but also the events unfolding in the world today. I wanted to find a way of accentuating that the refugee situation on Lesvos is not an incident that is unrelated to the history of the island but is rather something that shapes it today and will continue to do so in the future. Displaced people of different cultural backgrounds have come to Lesvos for centuries, such as happened with the exchange of people between Turkey and Greece in the 1920s, and will likely continue happening in the future. The individuals passing through the area and the circumstances in which they do, affect the island in a unique way, creating a local culture that is typically Greek and distinctively Lesvian. Because of this, I wanted to tell the story of a family of refugees travelling to Europe and eventually arriving in Moria, a story I was told by a person in the camp when I was visiting during the fieldwork. Through five panels I wanted this story to follow the project and colour it with lived experience, though without revealing any identifying features of the person the story belongs to. The sixth panel is an alternative ending to this story, in which they are welcomed into a city in stead of a camp.

The Hellenistic method of decorating clay pottery creates very distinct art that is easily recognized and connected to the country of Greece. Other media might reflect this drawing and painting style to achieve a desired effect, such as Disney did in order to visually connect the story to ancient Greece in the animated movie *Hercules*. Because it is so easily recognized as something innately Greek, I wanted to reflect this style to tell the story.

The decorations on Hellenistic pottery depict scenes from both legends and everyday life (Sparkes, 1991), and would include only the most important elements to tell the story the art was there to tell. It was made by carving into an unburnt clay pot with an array of sharp tools, leaving incisions to create line art that could function on its own or be filled with colour. Painting the pot with an ultra fine-grained clay slip would create areas of black after firing. In the 7th to the 3rd century BC there were developed two main styles of painting with the slip: the black-figure and the red-figure style (Sparkes, 1991). In the first one would fill the figures in the art with slip, creating black silhouettes as shown in

Figure 49-51. The latter is the inverse of this, making the negative space black while the figures themselves retain the red colour of the burnt clay. This is shown in the figures on the next spread. Additionally, one could apply different coloured paint, such as white or blue, after firing to accentuate lines or create a more colourful image (Sparkes, 1991).

The lack of clay and proper pottery making equipment available to me made me need to carefully consider what medium it was possible to convey the desired images through. It would need to both reflect and respect the style I was trying to capture. The seemingly effortless way in which Hellenistic pottery art depicts events, together with detailed line art and bands of pattern, was important to conserve to uphold a resemblance to the style. The typical black and red colours was also something I wanted to maintain. Looking at the pottery, the message is conveyed through silhouettes, lines, repeated patterns and fields of solid colour. Vector images are built with these same elements, and I had vector editing programs available to me on my laptop. I therefore decided to make vector panels. The first sketches were done by hand with plain, undisturbed pen lines, before being vectorized and further edited digitally. The final panels thus have become digital 21st century resemblances of the traditional Hellenistic pottery decorating method and are able to convey both the events and the message I want to tell.

Figure 49. Black-figure amphora by Exekias (Achilles killing the Amazon Queen Penthesilea), c. 540-530 BC, found at Vulci (The British Museum, London).

Figure 50. Black-figure amphora by Exekias (Achilles and Ajax Playing a Board Game), c. 540-530 BC, found at Vulci (Gregorian Etruscan Museum, Vatican City).

Figure 51. Black-figure amphora by the Plousios painter (a shoemaker's shop), c. 500-490 BC, found at Attica (Museum of Fine Arts, Boston).

Figure 52. Detail of a red-figure kylix by Gorgos, c. 500 BC (Agora Museum, Athens).

Figure 53. Red-figure amphora by the Achilles Painter (woman pouring libation for Athena), c. 460-450 BC (the Metropolitean Museum of Art, New York).

...re psykter by Douris (revelling ...the British Museum, London).

Figure 55. Red-figure amphora by the Marlay Painter (horsemen), c. 430 BC, found in Attica (The Metropolitean Museum of Art, New York).

Figure 56. Red-figure hydria by the Group of Polygnotos (Sappho reading poetry), c. 440-430 BC, found at Vari (National Archaeological Museum Athens).

ATTACHMENT 3

PAINTING THE BIG PICTURE

What was dubbed "the big picture" took a large amount of planning and energy to produce. Starting from a vision of a painting of mural-like proportions that would show the city in its entirety, the big picture would become the summation of the project. Inspired by *the Tower of Babel* painted in 1563 by Dutch artist Pieter Bruegel the Elder, which can be seen in Figure 57, the painting was meant to tell the story of how the city was to be constructed, function, and of the everyday life of its inhabitants. In a *Where's Wally*-like fashion (created by Martin Handford for the first time in 1987, see Figure 58), the big picture was also meant to portray all 28 design principles in such a way that they could be identified by the reader. What I would be producing was a wimmelbild explaining a vision of a city that does not exist.

The first step of the production was to find a canvas big enough to room a city. After deciding that painting directly on our neighbour's barn wall would be less than ideal in West-Norwegian weather, I found a 1.2 by 2.6 metre board in the back of a garage I could use. After rounds of cleaning and priming, it was ready to receive paint. This process is shown in Figure 59 and Figure 60.

The rough lines of the motif were quickly decided, though placing the right perspective on the board took some time. After the background was set, I sketched my ideas directly on the board before moving on to detailing (which by far was the bulk of the work). Starting from the back, the city was constructed with neighbourhoods, road network and public services all finding their spot in between the rows of olive trees. Making sure that all the principles were represented was an important part of the work. Only at the very end was the city populated. The entire painting process took approximately two weeks. The detailing alone took 11 days.

Figure 57. The Tower of Babel by Pieter Bruegel the Elder is so detailed that even today its audience are noticing new elements.

Figure 58. The Norwegian versions of Martin Handford's two books Where's Wally? The Fantastic Journey *and* Where's Wally? The Wonder Book.

Figure 59. The plywood board was dirty and had some minor damages when I found it in the back of a garage at home.
a - I needed a trolley to transport it around.
b - It was washed twice ...
c - ... and primed three times before I started painting.

Figure 60. The painting was propped up against a van in the same garage I found the board in. It was an ideal spot, as the garage was open and let in a lot of light during the day. Unfortunately, it also meant that it would become quite cold on rainy days and during the nights, which meant that the paint would take longer to dry.
I took one picture of the painting process each morning, all of which are presented here.

d   *e*   *f*   *g*

Ferdig!!

12 AUG 2020
22:50

SOURCES

Abourahme, N. (2014). Assembling and Spilling-Over: Towards an 'Ethnography of Cement' in a Palestinian Refugee Camp. *International Journal of Urban and Regional Research*, 39 (2): 200-217. doi: 10.1111/1468-2427.12155.

Abu-Lughod, J. L. (1971). *Cairo : 1001 Years of the City Victorious*. New Jersey: Princeton University Press.

Agier, M. (2002). Between War and City:Towards an Urban Anthropology of Refugee Camps. *Ethnography*, 3 (3): 317-341. doi: 10.1177/14661380240109279.

Agier, M. (2011). *Managing the Undesirables*. Cambridge: Polity Press.

Al-Nassir, S. (2016). *Refugee Camps as a Spatial Phenomenon of Self-Organization*. Brief for GSDR - 2016 Update. Available at: https://sustainabledevelopment.un.org/content/documents/973133_Nassir_Refugee%20Camps%20as%20a%20Spatial%20Phenomenon%20of%20Self-Organization.pdf?fbclid=IwAR2MuqTgUhNraHxEb6JKfv3UlKU05Sv1f00h2W1vFsYjvKvipQB89a1Ld1o (accessed: 24.04.2020).

Al Jazeera staff. (2018, 18. September). Greece to ease overcrowding in Lesbos refugee camp. *Al Jazeera*. Available at: https://www.aljazeera.com/news/2018/09/greece-ease-overcrowding-lesbos-refugee-camp-180918181232295.html (accessed: 15.07.2020).

Alba, R. & Nee, V. (2003). Remaking the American Mainstream. *Bibliovault OAI Repository, the University of Chicago Press*. doi: 10.4159/9780674020115.

Albadra, D., Coley, D. & Hart, J. (2018). Toward healthy housing for the displaced. *The Journal of Architecture*, 23 (1): 115-136. doi: 10.1080/13602365.2018.1424227.

Amin, A. (2002). Ethnicity and the Multicultural City: Living with Diversity. *Environment and Planning A*, 34 (6): 959-980. doi: 10.1068/a3537.

Baker, P., Bergman, R., Kirkpatrick, D. D., Barnes, J. E. & Rubin, A. J. (2020, 11. january). Seven Days in January: How Trump Pushed U.S. and Iran to the Brink of War. *New York Times*. Available at: https://www.nytimes.com/2020/01/11/us/politics/iran-trump.html (accessed: 28.04.2020).

Barberio, A. (2018). *Moria is in a state of emergency*. Available at: https://www.msf.org/moria-state-emergency (accessed: 21.05.2020).

Basu, R. & Asci, P. (2020). Intermediary Cities of Refuge: From Istanbul to Kolkata. In Thakur, R. R., Dutt, A. K., Thakur, S. K. & Pomeroy, G. M. (eds) *Urban and Regional Planning and Development: 20th Century Forms and 21st Century Transformations*, pp. 479-488. Cham: Springer International Publishing.

Batalla Adam, L. (2017). The EU-Turkey Deal One Year On: A Delicate Balancing Act. *The International Spectator*, 52 (4): 44-58. doi: 10.1080/03932729.2017.1370569.

Berry, J. W. (1998). Acculturation and health: Theory and research. In *Cultural clinical psychology: Theory, research, and practice.*, pp. 39-57. New York, NY, US: Oxford University Press.

Berti, B. (2015). The Syrian Refugee Crisis: Regional and Human Security Implications. *Strategic Assessment*, 17 (4): 41-53.

Biçer, N. (2017). The Views of Syrian Refugees Migrating to Turkey on the Turkish Language and Culture: Kilis Case. *Journal of Education and Training Studies*, 5 (3): 97-109.

Biermann, F. & Boas, I. (2010). Preparing for a Warmer World: Towards a Global Governance System to Protect Climate Refugees. *Global Environmental Politics*, 10 (1): 60-88. doi: 10.1162/glep.2010.10.1.60.

Black, R. & Koser, K. (eds). (1999). *The end of the refugee cycle? Refugee repatriation and reconstruction*. Oxford: Berghahn Books.

Boano, C. (2011). 'Violent spaces': production and reproduction of security and vulnerabilities. *The Journal of Architecture*, 16 (1): 37-55. doi: 10.1080/13602365.2011.547002.

Boeri, S. & Koolhaas, R. (2000). *Mutations*. Barcelona: ACTAR.

Bouaiti, E. A., Kessouati, J., Gartoum, M., Elbaite, A., Elkandry, S., Saïr, K. & Mrabet, M. (2016). Exploring Refugee Camp Needs: An Empirical Investigation of Maslow's Theory in Za'atari Camp in 2013. *IOSR Journal of Dental and Medical Sciences*, 15: 117-124. doi: 10.9790/0853-150901117124.

Bowen, W. & Gleeson, R. (2019). Mechanisms of Settlement Evolution: Cultural Learning and the Creation of Social Institutions: From Pleistocene Origins to Anthropocene Prospects. In, pp. 125-151.

Bowman, A. & Wilson, A. (2011). *Settlement, Urbanization, and Population*.

Butzer, K. W. (2008). Other Perspectives on Urbanism: Beyond the Diciplinary Boundaries. In Marcus, J. & Sabloff, J. A. (eds) *The Ancient City, New Perspectives on Urbanism in the Old and New World*, pp. 77-92. New Mexico: School for Research Presss.

Cartwright, M. (2019). *Lesbos*. Available at: https://www.ancient.eu/lesbos/ (accessed: 27.02.2020).

Cavill, N., Kahlmeier, S., Rutter, H., Racioppi, F. & Oja, P. (2008). Economic analyses of transport infrastructure and policies including health effects related to cycling and walking: A systematic review. *Transport Policy*, 15 (5): 291-304. doi: https://doi.org/10.1016/j.tranpol.2008.11.001.

Chase, L. & Sapkota, R. P. (2017). "In our community, a friend is a psychologist": An ethnographic study of informal care in two Bhutanese refugee communities. *Transcultural Psychiatry*, 54 (3): 400-422. doi: 10.1177/1363461517703023.

Connelly, C. (2016, 27. April). Refugee riot breaks out on Greek island. *Al Jazeera*. Available at: https://www.aljazeera.com/news/2016/04/refugee-riot-breaks-greek-island-160427122056272.html (accessed: 29.02.2020).

Council of Europe. (2018). *REPORT OF THE COMMISSIONER FOR HUMAN RIGHTS OF THE COUNCIL OF EUROPE DUNJA MIJATOVIĆ FOLLOWING HER VISIT TO GREECE FROM 25 TO 29 JUNE 2018*. Report from the Council of Europe 11.2018. Available at: https://rm.coe.int/report-on-the-visit-to-greece-from-25-to-29-june-2018-by-dunja-mijatov/16808ea5bd (accessed: 28.02.2020).

Cue, E. (2001, 29. November). UNHCR begins transfer of invisible refugees to camps. *UNHCR*. Available at: https://www.unhcr.org/news/latest/2001/11/3c066d4c4/unhcr-begins-transfer-invisible-refugees-camps.html (accessed: 20.05.2020).

Cuny, F. C. (1977). REFUGEE CAMPS AND CAMP PLANNING: THE STATE OF THE ART. *Disasters*, 1 (2): 125-143. doi: 10.1111/j.1467-7717.1977.tb00020.x.

Cupolo, D. (2015, 11. november). Inside Moria, Greece's 1st 'hotspot' refugee camp. *Deutsche Welle*. Available at: https://p.dw.com/p/1H0iH (accessed: 21.05.2020).

Dalal, A., Darweesh, A., Misselwitz, P. & Steigemann, A. (2018). Planning the Ideal Refugee Camp? A Critical Interrogation of Recent Planning Innovations in Jordan and Germany. *Urban Planning*, 3 (4): 64-78. doi: 10.17645/up.v3i4.1726.

Darcy, J. (2004). Locating Responsibility: The Sphere Humanitarian Charter and Its Rationale. *Disasters*, 28 (2): 112-123. doi: 10.1111/j.0361-3666.2004.00247.x.

Deshkar, S. & Adane, V. (2016). 16 - Community Resilience Approach for Prioritizing Infrastructure Development in Urban Areas. In Shaw, R., Atta ur, R., Surjan, A. & Parvin, G. A. (eds) *Urban Disasters and Resilience in Asia*, pp. 245-267: Butterworth-Heinemann.

DNT. (s.a.). *HYTTEBESØKET FRA A TIL Å*. Available at: https://www.dnt.no/hytteguide/ (accessed: 14.08.2020).

Earle, S. (2015). *Physical Geology*. British Columbia: BCcampus.

Erden, M. S. (2004). The Exchange of Greek and Turkish Populations in the 1920s and Its Socio-Economic Impacts on Life in Anatolia. *Crime Law and Social Change*, 41: 261-282. doi: 10.1023/B:CRIS.0000024437.30463.84.

Esfanjary Kenari, E. (2015). The longevity of Persian urban form: Maibud from late antiquity to the fifteenth century. *Urban Morphology*, 19: 57-71.

European Commission. (2015). *THE HOTSPOT APPROACH TO MANAGING EXCEPTIONAL MIGRATORY FLOWS*. Available at: https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/european-agenda-migration/background-information/docs/2_hotspots_en.pdf (accessed: 28.02.2020).

Ewans, M. (2002). *Afghanistan : A Short History of Its People and Politics*. New York: HarperCollins Publishers.

Fallon, K. (2019, 7. October). 'There is war everywhere. Why would we start a fire here?'. *Al Jazeera*. Available at: https://www.aljazeera.com/indepth/features/war-start-fire-191006184938305.html (accessed: 15.07.2020).

Farah, A. O. (2007). *Somalia : Diaspora and State Reconstitution In The Horn Of Africa*. London: Adonis & Abbey Publishers Ltd.

Fettig, T. (2007). *Bogotá : Building A Sustainable City*. USA: PBS.

Finegan, J. (2018). *Archaeological History Of The Ancient Middle East*. New York: Routledge.

Franck, A. K. (2018). The Lesvos Refugee Crisis as Disaster Capitalism. *Peace Review*, 30 (2): 199-205. doi: 10.1080/10402659.2018.1458951.

Gerges, F. A. (2016). *A History of ISIS*. Princeton, Oxford: Princeton University Press.

German Red Cross. (2016). *Guidelines on Emergency Sheltering for Refugees in Germany*. Berlin: German Red Cross.

Grbac, P. (2013). Civitas, polis and urbs - Reimagining the refugee camp as the city. *RSC Working Paper Series*, 96.

GREEKNET. (s.a.). *History and Culture og Lesvos (Lesbos) island, Greece*. Available at: https://www.greeknet.com/index.htm (accessed: 17.04.2020).

Greussing, E. & Boomgaarden, H. G. (2017). Shifting the refugee narrative? An automated frame analysis of Europe's 2015 refugee crisis. *Journal of Ethnic and Migration Studies*, 43 (11): 1749-1774. doi: 10.1080/1369183X.2017.1282813.

Grimal, P. (1983). *Roman Cities*. Wisconsin: University of Wisconsin Press.

Harris, B. (2007). *Who Hates Whom: Well-Armed Fanatics, Intractable Conflicts, and Various Things Blowing Up A Woefully Incomplete Guide*. New York: Three Rivers Press.

Heisbourg, F. (2015). The Strategic Implications of the Syrian Refugee Crisis. *Survival*, 57 (6): 7-20. doi: 10.1080/00396338.2015.1116144.

Heydemann, S. (2013). Tracking the "Arab Spring": Syria and the Future of Authoritarianism. *Johns Hopkins University Press*, 24 (4): 59-73. doi: 10.1353/jod.2013.0067.

Hou, W. K., Liu, H., Liang, L., Ho, J., Kim, H., Seong, E., Bonanno, G. A., Hobfoll, S. E. & Hall, B. J. (2020). Everyday life experiences and mental health among conflict-affected forced migrants: A meta-analysis. Journal of Affective Disorders, 264: 50-68. doi: https://doi.org/10.1016/j.jad.2019.11.165.

Hourani, A. (2013). *A History of the Arab Peoples: Updated Edition*: Faber & Faber.

Human Rights Watch. (2016). *Greece: Refugee "Hotspots" Unsafe, Unsanitary*. Available at: https://www.hrw.org/news/2016/05/19/greece-refugee-hotspots-unsafe-unsanitary (accessed: 28.02.2020).

Islam, N. (2020, 5. March). Remember the refugees stuck in the hell that is Moria. *Al Jazeera*. Available at: https://www.aljazeera.com/indepth/opinion/remember-refugees-stuck-hell-moria-200304115721901.html (accessed: 28.07.2020).

Jansen, B. (2011). The accidental city : violence, economy and humanitarianism in Kakuma refugee camp Kenya. *Journal of Biogeography - J BIOGEOGR*.

Jin, X., Long, Y., Sun, W., Lu, Y., Yang, X. & Tang, J. (2017). Evaluating cities' vitality and identifying ghost cities in China with emerging geographical data. *Cities*, 63: 98-109. doi: https://doi.org/10.1016/j.cities.2017.01.002.

Kachkar, O. A. (2019). Refugee Entrepreneurship: Empirical Quantitative Evidence on Microenterprises in Refugee Camps in Turkey. *Journal of Immigrant & Refugee Studies*, 17 (3): 333-352. doi: 10.1080/15562948.2018.1479913.

Kizos, T. (2020). *Lecture with professor Thanasis Kizos at the University of the Aegean*. Mytilene, Greece (15.01.2020).

Kontis, E. E. & Gaganis, P. (2012). Hydrochemical characteristics and groundwater quality in the island of Lesvos, Greece. *Global Nest Journal*, 14: 422-430.

Lambton, A. K. S. (1953). *Landlord and peasant in Persia: a study of land tenure and land revenue administration*. Oxford: University of Oxford Press.

Leraand, D. (2019). Den arabiske våren. In *Store Norske Leksikon*. Available at: https://snl.no/Den_arabiske_v%C3%A5ren (accessed: 28.02.2020).

Loewen, L. J., Steel, G. D. & Suedfeld, P. (1993). Perceived safety from crime in the urban environment. *Journal of Environmental Psychology*, 13 (4): 323-331. doi: https://doi.org/10.1016/S0272-4944(05)80254-3.

Loupou, C. (s.a.-a). *Charsi Hammam*. Available at: http://odysseus.culture.gr/h2/gh251.jsp?obj_id=15721 (accessed: 17.04.2020).

Loupou, C. (s.a.-b). *Valide Djami in Mytilene*. Available at: http://odysseus.culture.gr/h2/eh251.jsp?obj_id=433 (accessed: 17.04.2020).

Lowen, M. (2016, 20. September). Asylum seekers' anger catches fire in Lesbos. *BBC*. Available at: https://www.bbc.com/news/world-europe-37422832 (accessed: 29.02.2020).

Lu, L. (2006). "Cultural Fit": Individual and Societal Discrepancies in Values, Beliefs, and Subjective Well-Being. *The Journal of Social Psychology*, 146 (2): 203-221. doi: 10.3200/SOCP.146.2.203-221.

Lustig, S. L., Kia-Keating, M., Knight, W. G., Geltman, P., Ellis, H., Kinzie, J. D., Keane, T. & Saxe, G. N. (2004). Review of Child and Adolescent Refugee Mental Health. *Journal of the American Academy of Child & Adolescent Psychiatry*, 43 (1): 24-36. doi: https://doi.org/10.1097/00004583-200401000-00012.

MacKerron, G. & Mourato, S. (2013). Happiness is greater in natural environments. *Global Environmental Change*, 23 (5): 992-1000. doi: 10.1016/j.gloenvcha.2013.03.010.

Masiello, A. (2015). *The long journey to Europe*. Available at: https://www.lensculture.com/projects/232265-the-long-journey-to-europe (accessed: 10.02.2020).

Mattson, D. J. & Clark, S. G. (2011). Human dignity in concept and practice. *Policy Sciences*, 44 (4): 303-319. doi: 10.1007/s11077-010-9124-0.

McClelland, M. (2014, 13. February). How to Build a Perfect Refugee Camp. *The New York Times Magazine*. Available at: https://www.nytimes.com/2014/02/16/magazine/how-to-build-a-perfect-refugee-camp.html (accessed: 07.05.2020).

Mikhail, M. S. A. (2014). *From Byzantine to Islamic Egypt: Religion, Identity and Politics after the Arab Conquest*. London: Bloomsbury Publishing.

Monroe, C. & Schloen, D. (2002): The House of the Father as Fact and Symbol: Patrimonialism in Ugarit and the Ancient Near East. *Journal of the American Oriental Society*, 122: 904. doi: 10.2307/3217667.

MSF. (2020). *Evacuation of squalid Greek camps more urgent than ever over COVID-19 fears*. Available at: https://www.msf.org/urgent-evacuation-squalid-camps-greece-needed-over-covid-19-fears (accessed: 21.05.2020).

MSF. (s.a.). *Greece*. Available at: https://www.msf.org/greece (accessed: 21.05.2020).

Njoku, R. C. (2013). *The History of Somalia*. California: Greenwood.

Nutting, T. (2019). Headaches in Moria: a reflection on mental healthcare in the refugee camp population of Lesbos. *BJPsych International*, 16 (4): 96-98. doi: 10.1192/bji.2019.2.

Oka, R. (2011). Unlikely Cities In The Desert: The Informal Economy As Causal Agent For Permanent "Urban" Sustainability In Kakuma Refugee Camp, Kenya. *Urban Anthropology and Studies of Cultural Systems and World Economic Development*, 40 (3/4): 223-262.

Orsini, F., Kahane, R., Nono-Womdim, R. & Gianquinto, G. (2013). Urban agriculture in the developing world: a review. *Agronomy for Sustainable Development*, 33 (4): 695-720. doi: 10.1007/s13593-013-0143-z.

Pappé, I. (2014). *The Modern Middle East: A Social and Cultural History*. New York: Routledge.

Posselt, M., Eaton, H., Ferguson, M., Keegan, D. & Procter, N. (2018). Enablers of psychological well-being for refugees and asylum seekers living in transitional countries: A systematic review. *Health & Social Care in the Community*, 27. doi: 10.1111/hsc.12680.

Ragette, F. (2003). *Traditional Domestic Architecture of the Arab Region*. Stuttgart: Edition Axel Menges.

Ramadan, A. (2012). Spatialising the refugee camp. *Transactions of the Institute of British Geographers*, 38 (1): 65-77. doi: 10.1111/j.1475-5661.2012.00509.x.

ReliefWeb. (2018). *Bangladesh – The Rohingya refugee camp of Kutupalong-Balukhali, an ever-expanding camp*. Report by ReliefWeb 10. May. Available at: https://reliefweb.int/report/bangladesh/bangladesh-rohingya-refugee-camp-kutupalong-balukhali-ever-expanding-camp (accessed: 06.05.2020).

ReliefWeb. (2019). *Thailand: Mae La Temporary Shelter Profile*. Report by ReliefWeb 30. June. Available at: https://reliefweb.int/report/thailand/thailand-mae-la-temporary-shelter-profile-30-june-2019 (accessed: 06.05.2020).

Reynolds, J. (2015, 15. September). Migrant crisis: Hungary's closed border leaves many stranded. BBC. Available at: https://www.bbc.com/news/world-europe-34260071 (accessed: 15.08.2020).

Russell, R., Guerry, A. D., Balvanera, P., Gould, R. K., Basurto, X., Chan, K. M. A., Klain, S., Levine, J. & Tam, J. (2013). Humans and Nature: How Knowing and Experiencing Nature Affect Well-Being. *Annual Review of Environment and Resources*, 38 (1): 473-502. doi: 10.1146/annurev-environ-012312-110838.

Rydin, Y. (2012). Healthy cities and planning. *The Town Planning Review*, 83 (4): xiii-xviii.

Safi, Z., Dossa, L. H. & Buerkert, A. (2011). ECONOMIC ANALYSIS OF CEREAL, VEGETABLE AND GRAPE PRODUCTION SYSTEMS IN URBAN AND PERI-URBAN AGRICULTURE OF KABUL, AFGHANISTAN. *Experimental Agriculture*, 47 (4): 705-716. doi: 10.1017/S0014479711000482.

Salamandra, C. A. (2004). *A NEW OLD DAMASCUS : Authenticity and Distinction in Urban Syria*. Indiana: Indiana University Press.

Sanyal, R. (2012). Refugees and the City: An Urban Discussion. *Geography Compass*, 6 (11): 633-644. doi: 10.1111/gec3.12010.

Schelling, T. C. (1971). Dynamic models of segregation. *The Journal of Mathematical Sociology*, 1 (2): 143-186. doi: 10.1080/0022250X.1971.9989794.

Scott Smith, R. (2008). The Case of a City Where 1 in 6 Residents is a Refugee: Ecological Factors and Host Community Adaptation in Successful Resettlement. *American Journal of Community Psychology*, 42 (3): 328-342. doi: 10.1007/s10464-008-9208-6.

Siegfried, K. (2020a). *The Refugee Brief - 15 January 2020*. Report by the UNHCR. Available at: https://www.unhcr.org/refugeebrief/the-refugee-brief-15-january-2020/ (accessed: 17.04.2020).

Siegfried, K. (2020b). *The Refugee Brief - 22 January 2020*. Report by the UNHCR. Available at: https://www.unhcr.org/refugeebrief/the-refugee-brief-22-january-2020/ (accessed: 17.04.2020).

Sparkes, B. A. (1991). *Greek Pottery: An Introduction*. Manchester: Manchester University Press.

Sphere Project. (2018). *The Sphere Project: Humanitarian charter and minimum standards in humanitarian response*. Rugby: Sphere Project. Available at: https://handbook.spherestandards.org/en/sphere/#ch001.

Strickland, P. (2017, 10. December). Refugees in Greece's Lesbos left in the cold and rain. *Al Jazeera*. Available at: https://www.aljazeera.com/indepth/inpictures/refugees-greece-lesbos-left-cold-rain-171205183708628.html (accessed: 15.07.2020).

The Editors of Encyclopaedia Britannica. (2020). Lésbos. In *Encyclopaedia Britannica*. Available at: https://www.britannica.com/place/Lesbos-island-Greece (accessed: 17.04.2020).

The Guardian staff. (2016, 25. November). Fire breaks out at Moria migrant camp on Greek island of Lesbos. *The Guardian*. Available at: https://www.theguardian.com/world/2016/nov/25/fire-breaks-out-at-lesvos-migrant-camp-moria (accessed: 15.07.2020).

The National Herald staff. (2020, 17. January). Chaos in Greek Island of Lesbos over Killing of a 20-Year-Old Man from Yemen. *The National Herald*. Available at: https://www.thenationalherald.com/280635/chaos-in-greek-island-of-lesbos-over-killing-of-20-year-old-man-from-yemen/ (accessed: 29.02.2020).

TNH Staff. (2020, 17. January). Chaos in Greek Island of Lesbos over Killing of a 20-Year-Old Man from Yemen. *The National Herald*. Available at: https://www.thenationalherald.com/280635/chaos-in-greek-island-of-lesbos-over-killing-of-20-year-old-man-from-yemen/ (accessed: 17.04.2020).

Tomaszewski, B., Tibbets, S., Hamad, Y. & Al-Najdawi, N. (2016). Infrastructure Evolution Analysis via Remote Sensing in an Urban Refugee Camp – Evidence from Za'atari. *Procedia Engineering*, 159: 118-123. doi: https://doi.org/10.1016/j.proeng.2016.08.134.

Treaty of Peace with Turkey Signed at Lausanne. (1923). The Treaties of Peace 1919-1923. New York: Carnegie Endowment for International Peace, 1924.

Tsangarides, N. (2015, 7. September). REFUGEE CRISIS: LESVOS IS A WAITING HELL. *New Internationalist*. Available at: https://newint.org/features/web-exclusive/2015/09/07/refugee-crisis-greece-lesvos (accessed: 21.05.2020).

UN-Habitat. (2012). *The State of Arab Cities 2012, Challenges of Urban Transformation*. Report by the United Nations 2012. Available at: https://www.alnap.org/help-library/the-state-of-arab-cities-2012-challenges-of-urban-transition (accessed: 24.04.2020).

UN-Habitat, UNDP & DERASAT. (2020). *The State of Arab Cities 2020, Financing Sustainable Urbanization in the Arab Region*. Report by the United Nations 2020. Available at: https://www.arabstates.undp.org/content/rbas/en/home/library/Sustainable_development/the-state-of-arab-cities-2020.html?fbclid=IwAR2LwBFKGT_Oa2Tb9fYqqDnDzJs1ob5OSqVovnpRJLIEvEQFA_21Rgc4t_I (accessed: 24.04.2020).

UNHCR. (2009). *Media Advisory: Half of the world's refugees now live in cities*. Available at: https://www.unhcr.org/4b1cda0e9.html (accessed: 04.05.2020).

UNHCR. (2015). *UNHCR Emergency Handbook*: UNHCR. Available at: https://emergency.unhcr.org/ (accessed: 28.04.2020).

UNHCR. (2019). *Figures at a glance*. Available at: https://www.unhcr.org/figures-at-a-glance.html (accessed: 20.02.2020).

UNHCR. (2020a). *Greece situation*. Available at: https://data2.unhcr.org/en/situations/mediterranean/location/5179 (accessed: 27.02.2020).

UNHCR. (2020b). *ROHINGYA REFUGEE RESPONSE/BANGLADESH: Refugee Population by Location*. Report by UNHCR 15. March. Available at: https://data2.unhcr.org/en/documents/download/74675 (accessed: 06.05.2020).

UNHCR. (2020c). *Syria Regional Refugee Response - Zaatari Refugee Camp*. Available at: https://data2.unhcr.org/en/situations/syria/location/53 (accessed: 06.05.2020).

UNHCR. (2020d). *UNHCR STATISTICS*. Available at: http://popstats.unhcr.org/en/overview#_ga=2.185272489.1481155070.1588081667-1597120713.1576251800 (accessed: 28.04.2020).

UNHCR. (s.a.-a). *Kakuma Refugee Camp and Kalobeyei Integrated Settlement*. Available at: https://www.unhcr.org/ke/kakuma-refugee-camp (accessed: 06.05.2020).

UNHCR. (s.a.-b). *Refugee Camps*. Available at: https://www.unrefugees.org/refugee-facts/camps/ (accessed: 28.02.2020).

WFP. (2013). *WFP Executive Director Visits Kilis Refugee Camp in Turkey*. Available at: https://www.wfp.org/videos/wfp-executive-director-visits-kilis-refugee-camp-turkey-media?page=9 (accessed: 16.08.2020).

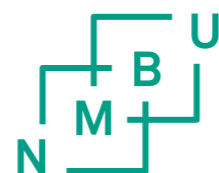Wicks, E. (2012). The Meaning of 'Life': Dignity and the Right to Life in International Human Rights Treaties. *Human Rights Law Review*, 12: 199-219. doi: 10.1093/hrlr/ngs002.

World Population Review staff. (s.a.). *World Population Review*. Available at: https://worldpopulationreview.com/ (accessed: 16.07.2020).

Zetter, R. (1995). *Shelter Provision and Settlement Policies for Refugees*. Uppsala: Nordiska Afrikainstitutet.

Ziya Pakoz, M. (2016, 18. May). Turkey's Kilis: A rare example of refugee integration. *Al Jazeera*. Available at: https://www.aljazeera.com/indepth/opinion/2016/05/turkey-kilis-rare-refugee-integration-160511102644814.html (accessed: 07.05.2020).

Zubaida, S. (1989). *Islam, the people and the state: political ideas and movements in the Middle East*. London: Routledge.