

Reconstructing Territorial Identities

The case of the refugee settlements in Nicosia, Cyprus



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P5 Report

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Abstract



One of the main results of Cyprus's contemporary conflict is the Cypriot refugee identity creation. The thesis focuses on the Cypriot refugee settlements created from 1976 to 1991, unraveling the formation of the Greek Cypriot refugee community through space. The thesis project questions how community-led spatial planning allows the Cypriot refugee settlements to be transformed into livable environments while preserving the memories of their initial inhabitants. Additionally, the project expands on how the planning process builds a community in a conflict environment and how the right to remembrance is spatialized conceptually while considering the spatial factors which influence the right to remembrance seen in theoretical notions.

Through the analysis of the spatial footprint of the Cypriot refugees, the refugee settlements, aspects of their liveability state, and remembrance of their past are depicted. The refugee community's and refugee settlement's current image are illustrated through quantitative and qualitative analysis. These areas' social consistency, and spatial characteristics, are combined with the actors and stakeholders involved, contributing to constructing and reconstructing the refugee identity. These elements have been used to form the spatial patterns that describe urgencies and critical features of the refugee community building. Moreover, the degree of place attachment of the refugee settlement residents and the factors responsible for their decay and embody the potential to contribute to community building are identified and used for the pattern language.

The spatial patterns formed through the analysis

of Nicosia refugee settlements and global reference patterns dedicated to community express the socio-spatial characteristics of the social group, the refugees, their living conditions, and how the life histories of the first generations have or can be imprinted through space. The patterns created represent starting points for synergies and cooperation among actors towards a socially conscious community's future at the refugee settlements. Spatial patterns related to the remembrance of the refugee community, combined with liveability aspects, aim to summarize the key elements that enable a community-led strategy, resulting in the landscape memorialization of the refugee settlements.

The complexity of the Cypriot refugee case, primarily because of their internal displacement, the unclear future of the refugee properties, and the de facto division of the island since 1974, make the Cypriot refugees a unique, extremely complex, particularly interesting case.

Keywords: community building, remembrance, refugee settlements, pattern language

Fig. 2: Illustration of the buffer zone and the refugee settlement locations. Source: Data based on QGIS, illustrated by the author

Acknowledgments

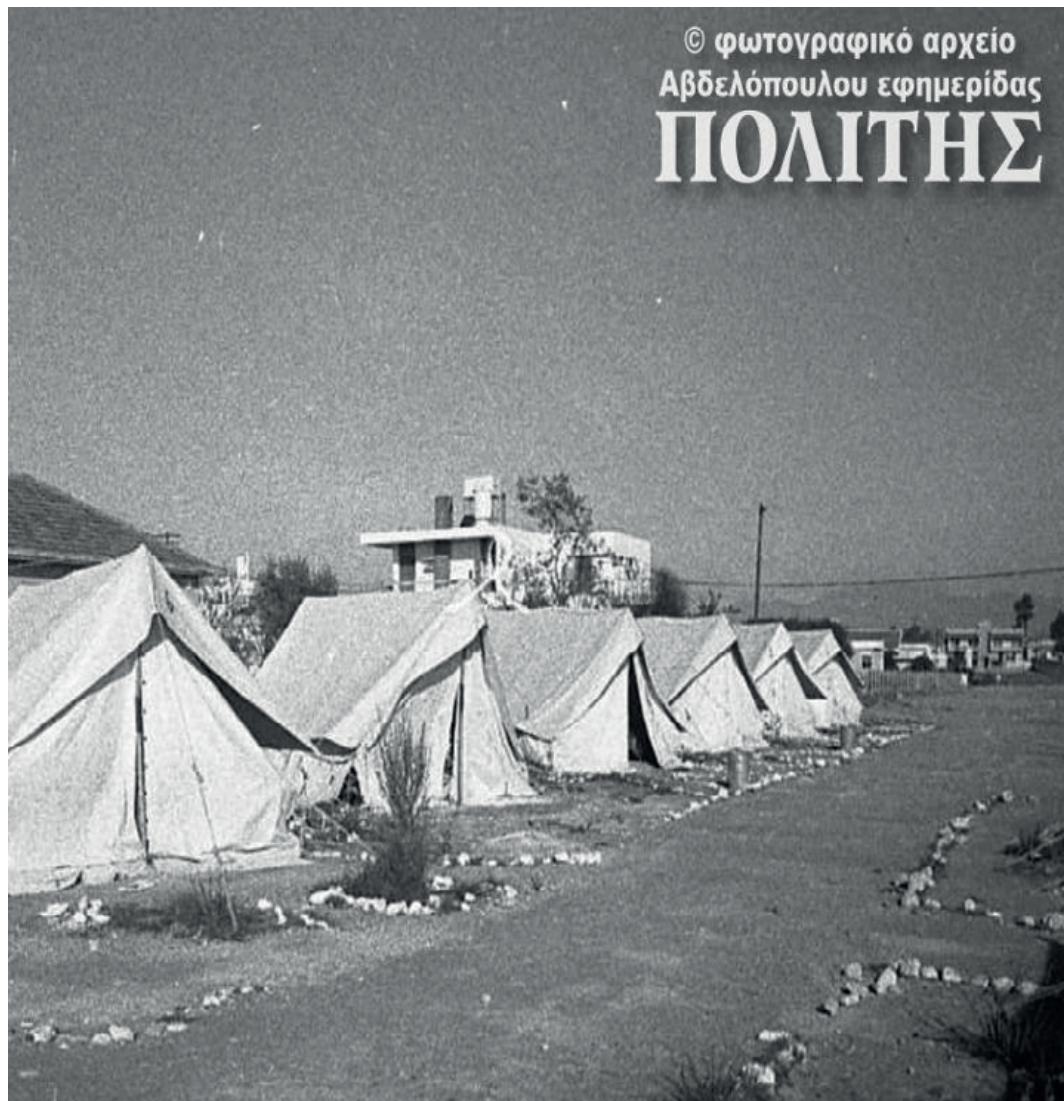


Fig. 3: A refugee camp in Nicosia. Source: Politis archive

Looking back on the process of my graduation project, I would like to express my gratitude to those who supported and guided me throughout this year. I warmly thank my mentors, Verena Balz and Ana Petrovi, for their guidance and support. Their critical feedback, valuable knowledge, and insightful conversations were vital for developing and enriching my thesis.

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Fig. 4: Illustration of the central public space and cadaster of the Anthoupoli Settlements in Nicosia, Cyprus. Source: Data based on QGIS, illustrated by the author

Motivation

My unintentional exposure to various niches of the different phases of a refugee was crucial for forming and developing the current thesis plan. I was grown up in Nicosia, the last divided European capital, while being a member of a refugee family from Nicosia. This mixture of experiences about the Complex Cities studio of the Urbanism track enabled me to reflect on the evolution of the refugee identity in the long term as well as the way that societies manage, integrate, or manipulate them in space and time through the case of the Cypriot Refugees of 1974 in Cyprus.

The Cyprus conflict can be seen as a humanitarian issue besides a geopolitical one. Therefore, why are the refugee settlements so important even if they consist of spatial reminders of a traumatic past? Cyprus is an island that consists of barriers, divisions, contested environments, and buffer zones. These are all spatial consequences of its greatly desired strategic location of geopolitical importance. But the political actions of greater forces, neighboring countries, and big powers have had a significant impact on Cyprus. The effect is identifiable in space, people, and their emotions. Therefore, the constructed division had its most significant impact on people who lost their homes, families, and identities.

Part of Cyprus's contemporary heritage is the identity of the Cypriot refugees. The most significant part of them is spatially identifiable through the refugee settlements. Thus, it is vital for my project to understand the current social consistency of these areas, their spatial characteristics, and all the parties involved that contributed to the construction and reconstruction of the

refugee identity. These elements will depict the urgencies and the key features that can begin a conversation among actors towards a socially conscious future of the community at the refugee settlements.



Fig. 5: Refugee Stamp. Created in 1974. According to the Department of Postal Services, the aim of the refugee stamp from the beginning was to disclose the conflict of Cyprus abroad. Anything sent abroad had to be stamped with a specific stamp. An additional role of the stamp was to strengthen the Refugee Fund. Source: www.polignosi.com. (n.d.). <http://www.polignosi.com/cgi-bin/hweb?-A=12667&-V=limmata>



I n t r o d u c t i o n

This chapter contains the historical and contextual information on Cyprus's contemporary conflict history, illustrating the complexity of its de facto spatial and societal division. It introduces the project's problem statement, research aim, and questions on the Cypriot refugee settlements and community.

Fig. 6: To the left is a Greek-Cypriot military post next to an entrance to the buffer zone. In the background, a Turkish-Cypriot military post was seen to the buffer zone's other side. Ermou street, Nicosia 2020

1.1 Cyprus

The strategic location of Cyprus in the Eastern Mediterranean is the leading cause of the deep colonization of the island through the centuries and the frequent interface for Cypriots with Asian, African, and European cultures and civilizations. It has caused multiple territorial and societal conflicts on the island. In 1571 Cyprus was conquered by the Ottoman empire. Consequently, the Ottomans ceded the island to Great Britain in 1878, which annexed the island officially in 1914. Cyprus achieved independence in 1960 after the agreements signed in Zurich and London in February of 1959 between the representatives of the United Kingdom, Greece, Turkey, and the two Cypriot communities, Greek Cypriots and Turkish Cypriots. The constitution of 1960 provided for the participation of both communities in all the institutions of the new republic.

Shortly after the independence of Cyprus in 1960, the tensions among the Greek Cypriot majority of approximately 80% and the Turkish Cypriot minority of 18% began (Kyle, December 1997). In 1974, the invading Turkish forces drove an ethnic separation between Greek Cypriots and Turkish Cypriots. The most tacit result of this conflict was the displacement of a large portion of the island's population. During 1963–64, approximately 25,000 Turkish Cypriots comprised one-fourth of the Turkish Cypriot community, and seven hundred Greek Cypriots were displaced. The vast majority of the Greek Cypriot inhabitants from the northern region have been displaced due to the Turkish military action in 1974. Most of the Greek Cypriot population in the north displaced during 1974 (190,000 persons) absconded their homes

in the word of the Turks' approach. A substantial number of Greek Cypriots who remained in the north of Cyprus after the arrival of the Turkish troops were relocated because of various measures of displacement. At the same time, about 50,000 to 60,000 Turkish Cypriots fled north, including people who had been displaced earlier (Balexert, 2005). Approximately 75 % of the displaced Cypriots were of rural background and lost their living subsistence) because of the displacement.

In response to the crisis, refugee settlements were created to house Greek-Cypriot refugees on the outskirts of the cities. Due to the devastating number of people who needed to be housed, the settlement construction was divided into three phases. During the first phase, large low-cost settlements of five hundred to a thousand housing units were built. This phase aimed to house as many refugees as possible in a short period of time. The next phase consisted of a higher number of refugee settlements with fifty to two hundred housing units, a housing unit number much lower than the first phase. The purpose of the settlements was to house as many refugees as possible until a permanent solution among Cypriots was found. Their construction was completed in 1991. However, the frozen conflict in Cyprus since 1974 continues to have many socio-spatial consequences and a significant impact on the lives of the residents of the refugee settlements. At the island level, the violent de facto division of Cyprus and the ethnic separation has built up a social distance between Greek Cypriots and Turkish Cypriots. At the level of cities and urban



Fig. 7: Bullet-holes in a façade, Cyprus, 1974. Source: Jean Mohr (Swiss, 1925-2018), © Jean Mohr, Musée de l'Elysée

regions, the conflict has and continues to shape the identity of the residents of the neighborhoods as well as their livability.

During the implementation phases of the state's refugee settlements, a new social identity was constructed: the Cypriot refugee identity. This identity found expression in political events and media, for instance, via regular podcasts of the status of the refugees or the true impact of the implemented measures on the refugee community. It found expression in dedicated organizations, for instance, the refugee association that was newly formed in 1974 and soon started acting as an institution advocating the refugees' rights. Last but not least, the identity found expression in the concurrent spatial development of the refugee neighborhoods themselves. As Cyprus' overall urban environment evolved over time, the refugees' neighborhoods emerged as distinguishable units and, therefore, as a heritage and reminder of the conflict. However, spatial expressions were and are harmful, leading to socio-spatial segregation.



Fig. 8: Cypriot refugee family during their village evacuation. Source: Cyprus Broadcasting Corporation TV, Doros Partasides, Cameraman/Photographer covering the Human Suffering

1.2 The Long-Term Impact on The Refugee Community

The temporary status of property rights above all accelerated spatial distinctiveness. For decades the Greek Cypriot refugee community squeezed and patiently waited in the isolated, stigmatized refugee settlements for their leave, as did the manipulation from the state, with the least possible changes and adaptations. On the one hand, this temporariness forced the most vulnerable community in the conflict to wait for the full recognition of their rights since the initial cause of their displacement, a lifetime in many cases. The long-term waiting led to a lack of place attachment with their neighborhoods, not just the first but also the second-generation refugees. On the other hand, temporariness has discouraged spatial planning and investment in the built environment, which has impacted liveability, accelerated decay, triggered abandonment, and led to an unbalanced social and demographic composition of residents. Today, the larger refugee settlements consist of clusters with a high concentration of older adults. The elderly are usually the remaining first-generation refugees that have grown older while observing how their neighborhoods and memories of their community are fading away.



Fig. 9: Collage of resent and past of refugee community living environment. Right image retrieved from: <https://www.pep.org.cy/wp-content/uploads/2019/08/E3-30-9.jpg>

1.3 Problem Statement

As noted, the liveability and heritage urgencies of the Greek Cypriot refugee settlements threaten the refugee community's existence since no holistic planning for the transformation of the settlements exists. And as for the settlements themselves, the lack of maintenance and planning phase already started an unplanned transformation. In particular, the perception of the settlements as a temporary solution impacted their liveability conditions. Concurrently with the status of the refugee neighborhoods themselves, as Cyprus' urban environment evolves through time, issues on the heritage and memories of the first generation of refugees that the neighborhoods were created for emerge. Life histories collectively form a part of the heritage of a spatial form of cohabitation that will not exist in Cyprus again. Thus, part of Cyprus's recent and ongoing history is being forgotten through their fading remembrance.

However, ignoring a traumatic past is a phenomenon that individuals apply until they can atone with it. Nevertheless, when ignoring affects the lives of others, then it becomes a more complex matter. In the long term, the lack of visioning and spatial planning of the refugee community and the refugee settlements in Cyprus after their creation is an example of the violation of their rights. Consequently, the absence of a holistic spatial strategy for the refugee settlements, one of the denser urban areas in Cyprus, has created an aging population in a monofunctional urban space in decay still waiting.



Fig. 10: "Attention entry is forbidden" Vacant building due to structural failure, Anthoupoli Settlement, Nicosia January 2022

1.4 Research Aim

This project is concerned about the refugees in Cyprus and focuses on the governmental refugee settlements still housing Greek Cypriot refugees. Its main aim is to explore a strategy that supports the transition of the refugee settlements to livable neighborhoods without erasing their heritage. Therefore, the guidelines for the uncontrolled transition that is already happening will be planned and designed. Planning will ensure the liveability of these areas in terms of place attachment, accessibility, and affordability while maintaining spatial reminders of the life histories of the neighborhoods' initial inhabitants.

A livable and memory landscape can be created in the refugee settlements by ensuring a strong community. A community empowered through the involvement of the younger generations of refugees who have not experienced the conflict. Thus, building a solid community will constitute a leading force in the regeneration of the refugee settlements concerning the life histories of the first-generation refugees. In short, through the strategy developed with the graduation thesis, I aim to create a tool for discussion at the local and national level, leading to constructing a feeling of prosperity for the future living in the refugee settlements as equally and fairly treated neighborhoods, in respect to their past, through planning.

The aim evolves against the broader aspiration to support sustainable and fair development in a contested environment. The Cyprus conflict can be seen as a humanitarian issue besides a geopolitical one. Then, why are the refugee settlements vital if they are spatial reminders of a traumatic past? Cyprus is an island that consists of

barriers, divisions, contested environments, and buffer zones. These are all spatial consequences of its desired strategic location of geopolitical importance. But the greater forces' political actions have significantly impacted Cyprus. As explained previously in this chapter, the effect is identifiable through space, people, and emotions. Therefore, the imposed division had its most significant impact on people who lost their homes, families, and identities.

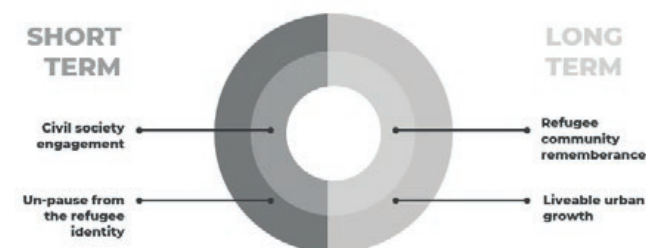


Fig. 11: Research aim diagram



Fig. 12: Collage of the main square in Anthoupoli Settlement

1.5 Research Questions

How can **community-led spatial planning** enable the Cypriot refugee settlements to be transformed into **livable environments** while preserving the memories of their initial inhabitants?

Critical Questions

Spatial patterns:

- What did the Cypriot refugee identity evolve through time, and how was its relationship with the refugee settlements? What is the current state of the refugee settlements in terms of liveability?
- What are the social characteristics and the spatial patterns of the refugee settlements, and how do they differ from other urban neighborhoods' socio-spatial patterns in the region?
- How can the right to remembrance be spatialized conceptually, and which spatial factors influence the right to remembrance seen in theoretical notions in the fields of psychology and spatial design?
- Which spatial patterns are expressions of the refugee memories in the refugee settlements in Cyprus?

Community Building

- How can the planning process build a community in a conflict environment?
- What is the degree of place attachment of their residents? What factors are responsible for their decay, and what has the potential to contribute to community building?

1.6 Approach & Readers Guide

The wider approach used to reach the aim of the project is shaped by an in-depth exploration of the spatial patterns in the refugee settlements, that are the result of past, current, and future social, environmental, and morphological development of the refugee community located in the refugee settlements through the case of Nicosia.

The complexity of the Cypriot refugee case, primarily because of their internal displacement, the unclear future of the refugee properties, and the de facto division of the island since 1974, make the Cypriot refugees a unique, extremely complex, and particular case. Through the analysis of the spatial footprint of the Cypriot refugees, the refugee settlements through time, aspects of their liveability state, and remembrance of their past can be unraveled. Therefore, new patterns can emerge in community building by exploring spatial patterns of liveability and landscape memorialization in the refugee settlements.

The spatial patterns express the socio-spatial characteristics of the social group, the refugees, their living conditions, and how the life histories of the first generations have or can be imprinted through space. This report is concerned with the refugees in Cyprus in 1974. The following chapters attempt to introduce the thesis plan with the context and methodology used to respond to the research questions during the thesis preparation period. The introductory chapter describes the context of Cyprus, where the rationale is set, and the problem statement, research aim, and research questions are formed. Chapter two, titled 'Conceptual Framework,' introduces the notions drawing from theory used for the

conceptual framework on community building strategy, based on the rights to remembrance and liveability; chapter three expands on the methodology intended to follow the research thesis, chapter four, 'Contextual Analysis of the Refugee Settlements' investigates the existing spatial patterns of the refugee settlements in Nicosia along with reference spatial patterns on conflict, remembrance, and liveability from international paradigms. Chapters five and six are dedicated to the formation of the pattern language and the exemplary application to the Anthoupolis refugee settlement. Lastly, chapter seven, 'Conclusion, Ethics, and Reflection,' expand to a conclusion on issues of ethics and relevance to the scientific and social context for the Cypriot refugee community, the refugee settlements but also the field of spatial planning for community building in conflict environments followed by the Literature used in chapter seven and the Appendix.



Fig. 13: Diagram of inter-scalar analysis. Data based on QGIS, illustrated by the author



2 . C o n c e p t u a l F r a m e w o r k

The following chapter introduces the theoretical notions used to form the conceptual framework. In this chapter, notions of liveability and remembrance of a community are combined with displacement, conflict, and microhistories to illustrate the parallel levels of conceptualization, analysis, and strategy on which the following chapters are based.

Fig. 14: Ethnomartyras Settlement, Nicosia September 2019

2.1 Theorizing Remembrance and Livability

Although addressing a refugee community in a conflict environment through spatial planning is often given attention in the short term, the following theoretical notions are used to illustrate and conceptualize the current state of the refugee community and their needs, considering both the short and long-term. Migrants and refugees embody concepts of diaspora and hybridity in terms of spatial and societal integration, as they oppose constructions of place-bound 'communities' (Vaiou & Stratigaki, 2008). Therefore, the ways in which refugees construct very local but also transnational and imagined communities. At the same time, they seek to settle and find ways to integrate into the new setting, which are aspects that can be conceptualized through spatial patterns. Informal practices support and assist the vulnerable communities at the neighborhood level. Therefore, the following notions are used to encapsulate elements that describe the transitional relationship from 'settlement' to 'integration.'

Patterns Language

Pattern language embodies and connects with the needs of human behavior. According to Alexander, Pattern Language is a practical tool that prioritizes patterns according to size and field (Salingaros, 2000). Like any other language, Pattern Language requires patterns on multiple levels necessary to relate to physical activities. As distinct parts of a complex system, patterns constitute all levels vital, such as abstract or specific patterns representing details or spatial phenomena. Pattern languages condense human performance and enable us to express complex

environments. They apply to various scales and fields such as buildings, institutions, organizations, neighborhoods, or cities.

What we are talking about is changing the processes by which buildings are made--not the 'things,' but the processes by which they are conceived and funded and regulated and constructed...; unless one changes those processes, one is not changing anything at all. Christopher Alexander 1 (Quoted in Grabow, S Christopher Alexander: The Search for New Paradigm in Architecture Oriel, Boston (1983) p 140)

Spatial patterns are distinguishable and repetitive spatial configurations that reoccur in space. They are the results of spatial practices. Spatial patterns describe problems and core solutions that can be used in several ways within a specific field of expertise. The relations created among patterns can create complementarity or conflict links and thus add up to illustrate socio-spatial complexity in simple terms.

Socio-Spatial Fragmentation

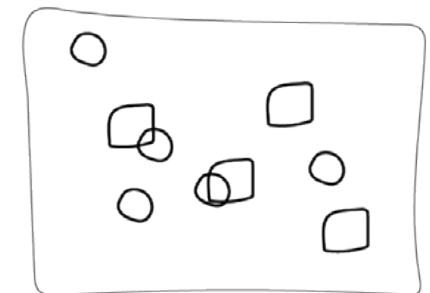
Fragmentation is a powerful metaphor that interweaves its social and spatial aspects in many cases. (Bodnar, 1996). A configuration of socio-spatial fragmentation is urban fragmentation. It refers to the disintegration of urban forms.

Spatial planning

Spatial planning has many broad definitions. All have specific common characteristics. They describe a system where actors cooperate based on land-oriented strategies, visions, and policies with a territorial influence.

"The standard spatial planning storyline is that, compared with previous regulatory land-use planning approaches, it is distinctive for encouraging long-term strategic visions; providing the spatial dimension to improved integration across a range of sectoral plans and activity; supporting 'balanced' approaches to sustainable development; and improving engagement with stakeholders and the public" (Allmendinger and Haughton, 2010, p.803).

"Spatial planning is the system of tools that regulate land and property use, and enable co-operation across government, market and civil society actors to coordinate the territorial impacts of sectoral policies" (ESPON COMPASS, 2018).



Pattern Integration

Conflicted and Contested
Environments & Identity

Displaced person

For Cyprus, a displaced person signifies a person whose permanent residence is either in the occupied (by the Turkish troops) areas and is not accessible; the permanent residence is in the neutral zone, which is controlled by the Peace Force (of the United Nations), or, if it was vacated, is used for the needs of the National Guard. Provided that younger and future generations, children descending from a displaced parent are considered to have their permanent residence in the occupied areas. Therefore, within the meaning of this Law, they are displaced persons from the same place where their parents come from. In short, internally displaced people as Cypriots of 1974 are IDPs.

Refugee Identity

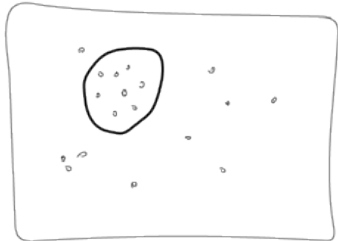
According to the 1951 Refugee Convention, A Refugee is a human being located outside the country of his nationality, reasonably fearing being persecuted (David Officer, 2013). In Cyprus, a law grants IDPs a special “refugee identity card,” The national IDP (Internal displacement person) status is transferable to children of IDPs, forming second, third and fourth generations of refugee Identities.

Regional Identity

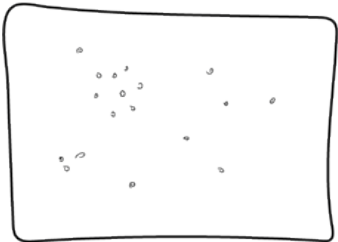
Regional identity is created when a social group is identified as ‘cultural, social, and economic, technological, and other specificities of a territory that makes it different from other territories’ (Roca & Carvahlo Mourão, 2004, p. 88). Therefore, regional identity can be described as “an abstraction that divides the indivisible, a form of categorization, where boundaries are used to distinguish one areal domain or social collectivity from others” (Paasi, 2002, p. 139) (Capello, 2018b). The formation of this similarity and solidarity of the local community group can be created based on the shared social values of the social group and the feeling of togetherness and belonging. Through this process, a regional identity can be created and lead to collective actions in achieving social, economic, and political objectives.

Territorial identity

A territorial identity is created when a social group accepts a fundamental connection that causes them to feel unity among themselves.’ (Figlestein et al., 2012, p. 108)(Capello, 2018a). In other words, a territorial identity is formed when a social group develops characteristics of similarity, shares social values, performs commonly in the production of experiences and culture, and develops relationships in a local area. Features of similarity are intertwined with characteristics of solidarity. Therefore a sense of belonging and attachment within the social group results in the private and public interests(Capello, 2018b).



Regional Identity



Territorial Identity

Right to Remembrance

Remembrance

Remembrance is the recollection of memories related to a specific event. It is perceived differently over generations and ethnicities, and social groups. The right to remembrance ensures the remembrance of meaningful events for a society relates to the human rights of certain groups of individuals that have been comprehensively ignored.

Remembrance is directly linked with human rights related to society's past, present, and future. Traumatic events, and results from human activities, deserve to be remembered or reminded concerning the ones who experienced them and for the atonement with the past to construct a resilient future. The right to remembrance is a severe difficulty. It can involve social groups that need recognition, especially when it involves parts of the broader social group that need to acknowledge their role in causing the traumatic event (Clark et al., 2020).

Official remembrance is typically established by administrations, something complicated as, in many cases, they are unwilling to admit to past missteps that had severe consequences regarding human rights.

Remembrance is significant for young people. The principal social group that remembrance activities and projects refer to is young people. This is due to the perception that reconciliation and dialogue should be achieved and exerted (Clark et al., 2020).

Spatial remembrance

Remembrance is difficult to spatialize. Landscape Biographies are a way to spatialize remembrance by linking space with experiences. – link to spatial patterns.

One of the critical aspects of landscape biography is the reaction to the developments happening in the society and the relations between landscape and heritage. They link different mnemonic and social systems, memories, values, and ideas with the physical world (Kolen & Renes, 2018).

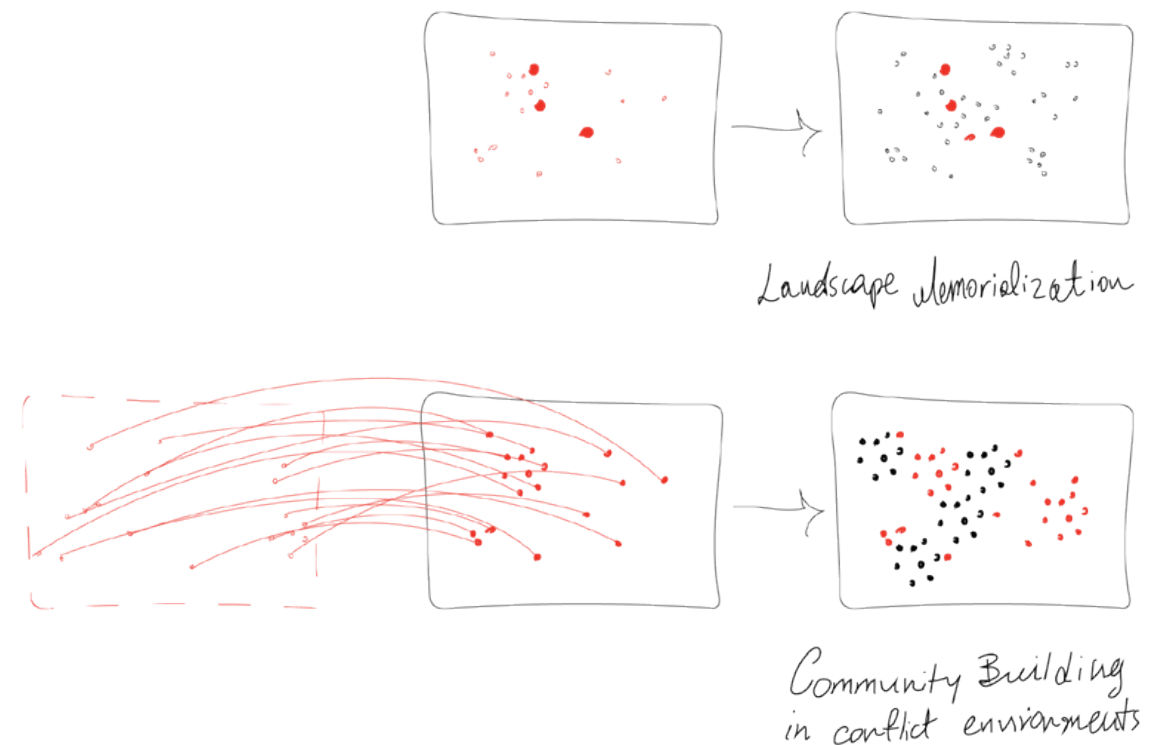
Microhistories

Microhistories consist of a genre of history that focuses on small research units, such as an event, a community, an individual, or a settlement.

Microhistories are directly related to the time variable. They are relevant to a society when the microhistory timescale is related to the present. A timescale consists of the period needed or taken for a sequence of processes or events (Oxford Languages). The classification of time to timescales contributes to the history of societies in the long durée (Kolen & Renes, 2018).

Heritage

Heritage is the spectrum of our inherited monuments, objects, culture, and contemporary activities, meanings, and behaviors we derive from. Heritage is fundamentally a phenomenon directly linked to space. Scale, location, and distribution are characteristics of heritage.



'The stories and places of contemporary heritage are often the most overt examples of contemporary politics of the past, but other historical forms, including the writing of...geography, need to consider the implications of how the past is retold.' (Nash and Graham 1999, p.2)

By conceptualizing heritage as meaning instead of a relic, the perception of the heritage meaning varies depending on the audience, and therefore social conflict and tension arise (Graham, Brian, 2000).

Right to Liveability

The right to liveability ensures the right to a standard of adequate living, such as sustainable transport, access to affordable housing, and social services.

Housing Affordability

Housing Affordability is the supply of adequate housing that people can afford. Affordable housing is a critical element for development and social equality and has become urgent as, now more than ever, citizens in the area close to urban centers cannot afford home ownership or rental housing (Nations & Settlements, 2020).

"While millions of people lack suitable homes, the stock of vacant houses is gradually increasing," "Ensuring housing affordability is, therefore, a complex issue of strategic

importance for development, social peace and equality," Dr. Joan Clos, Executive Director of the UN Human Settlements Programme (UN-Habitat) (Day, 2017)

Community building in conflict environments

Community Building

Individuals in contemporary societies feel the need to be part of meaningful relational and cultural networks, to support and be supported through an exchange system. Community building is directly related to collective memory.

Conflicted Patterns

They influence the development of space-conflict infrastructure fragmentation. Conflicted patterns are symbolic, institutional, and territorial shaping used by a social group to relate, identify and redefine their territorial identity. As a process of memory and memorialization through generations, they can lead to landscape memorialization.

2.2 Conceptual Framework

To fully understand the needs of the Cypriot refugee community, notions of the right to the remembrance of the life histories of the social group are combined with their right to liveability.

The spatial expressions through repeatable and identifiable urban characteristics are integrated through the patterns to reconstruct the territorial identity of the refugee community embodied in urban space. This process will enable the right of the current refugee community, including the first refugee generations and the ones that inherited the refugee identity, to be re-established and connect with the spatial traces of their past and build a community.

Refugees or internally displaced, adapting to their newly constructed identities and new, unfamiliar environments, have humanitarian needs as a priority. But what happens to the social group when their humanitarian needs are fulfilled? Sometimes societies, organizations, and governments tend to forget more than they should.

The long-term frozen conflict in Cyprus has resulted in some not so evident social and spatial implications in the long term for the refugee community. Since 1974, the lack of planning for the spatial footprint of the refugee community after their creation, the governmental refugee settlements, has resulted in a fading community in a conflict environment in decay frozen in time. The need to combine and prioritize the right to the remembrance of the first-generation refugees, their life histories, and their heritage is inextricably linked with the right of a well suffered social group to a livable living environment. The right of the current

refugee community to be identified with the spatial traces of their past, the refugee settlements, leads to the pattern integration of the patterns of remembrance and liveability. The new spatial patterns can then enable a new territorial identity to be reconstructed and build a community in a conflict environment such as one of the Cypriot governmental refugee settlements.

The integration of the existing and new patterns could have the potential to enable the current and future generations of the refugee community to be aware of their past, so they can then remember.

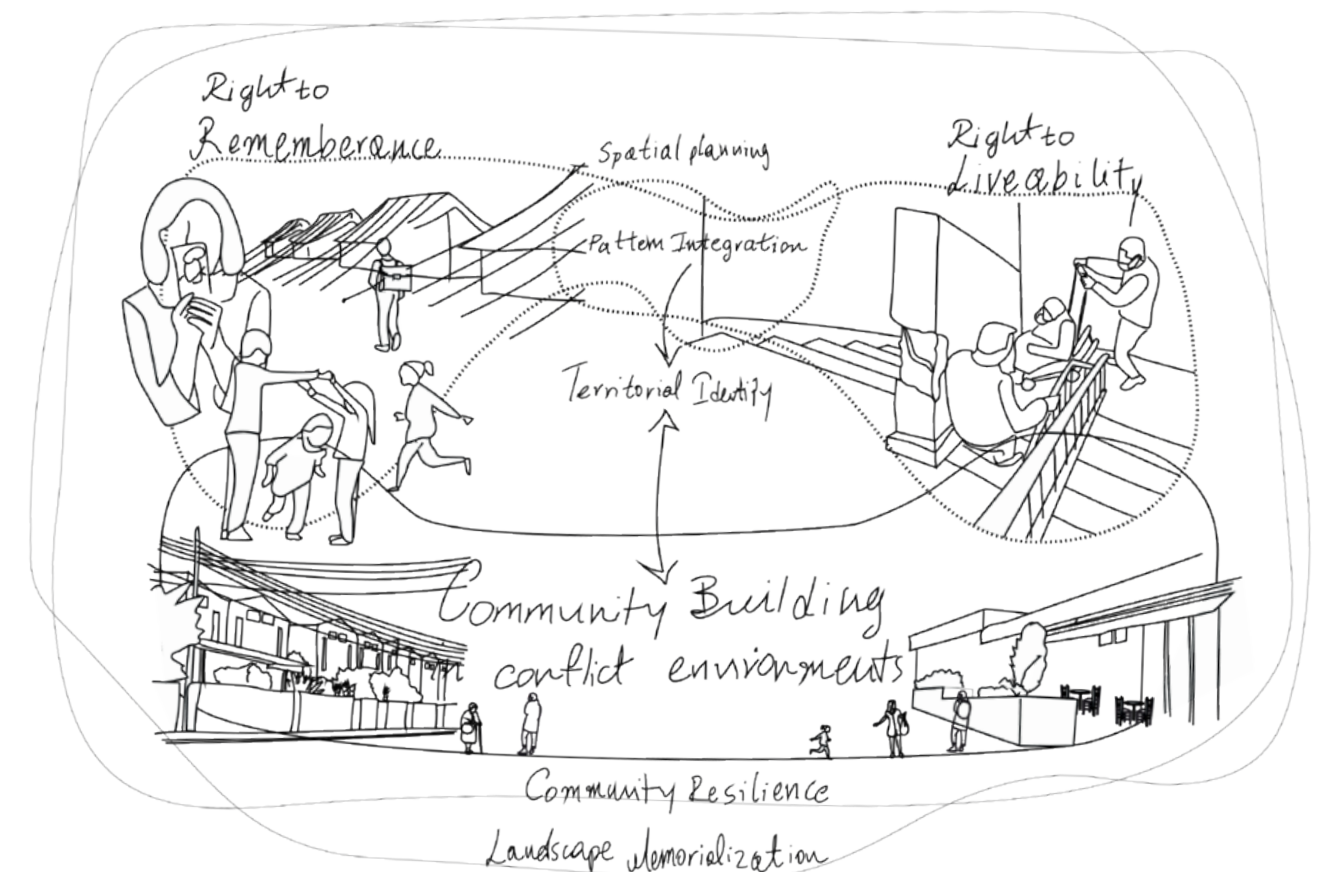


Fig. 15: Conceptual Framework Diagram

3 . D a t a & M e t h o d s

The following chapter is dedicated to the chosen methodology used during the thesis preparation. The set of quantitative and qualitative chosen methods are introduced along with their relationship with the research questions and the intended research outcomes.

Fig. 16: Ethnomartyras Settlement, Nicosia September 2019

3.1 Methodological Framework

Analyzing a community in a conflict environment is somewhat an intangible process. The central pillar of the methodology used is the combination of qualitative and quantitative methods (Fig. 17). This aspect enables a holistic description of the characteristics of the refugee settlements up to a certain extent and allows an effective comparison among them.

Based on the context of the Cypriot refugee settlements, resources are primarily qualitative, based on the feelings and emotions of people. The instruments used to reach these resources are crucial to unlocking such intangible, personal and sensitive information. The information is extracted through local discussions and site observations to reach the local community.

Through the analysis with potential and already involved NGOs, representatives of the refugee community, and the refugee settlements through the years, information for the stakeholder analysis is extracted that, combined with quantitative data, such as statistical analysis of the Cypriot demographics, create a representative image of the current state of the refugee settlements in comparison with the rest of the urban Nicosia.

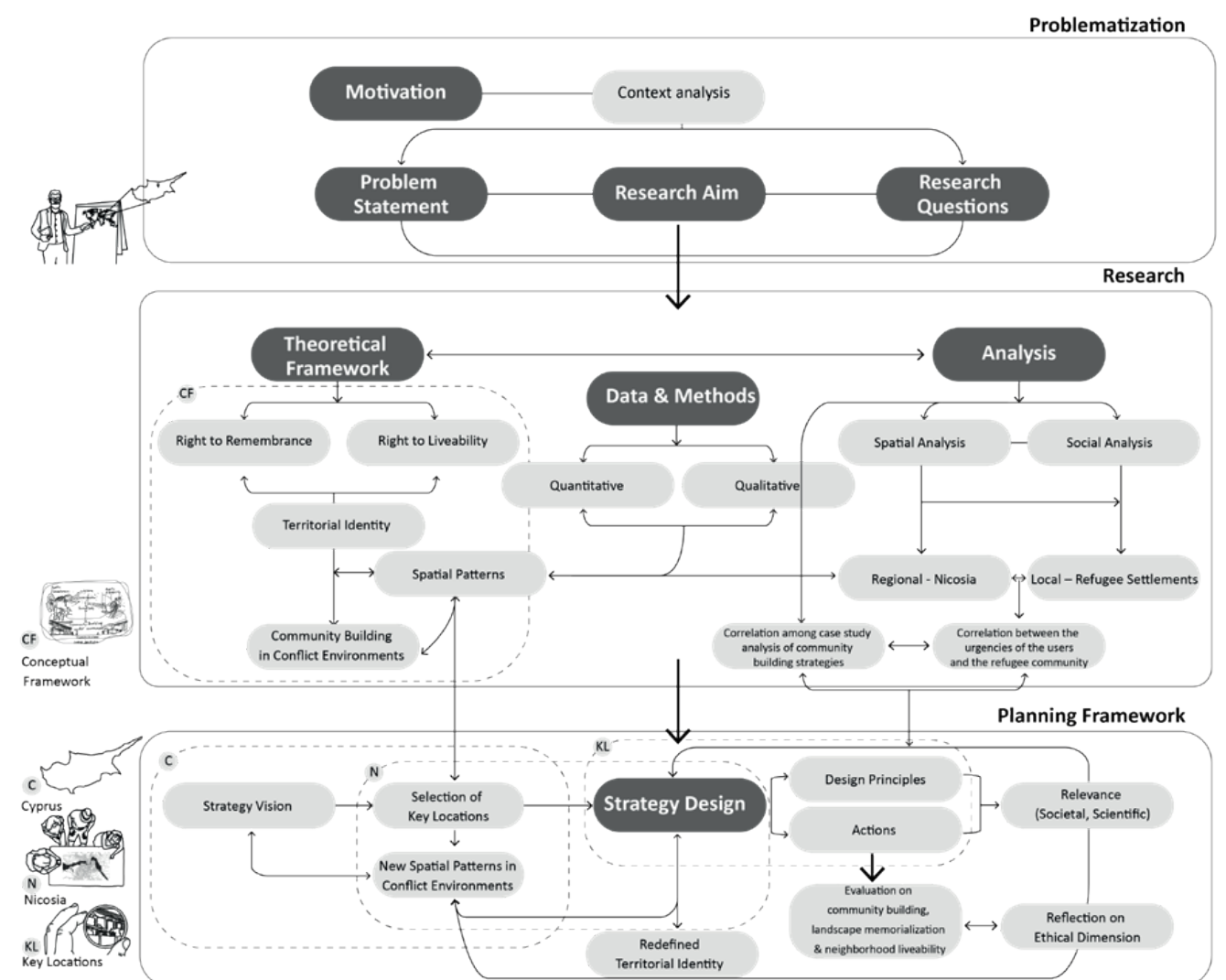


Fig. 17: Methodological framework

The design assignment of the current thesis plan is a community-led proposal for a strategy aiming at the regeneration of the refugee settlements in Cyprus. The strategy is formed through a comparative case study analysis of memorialization and community-building spatial patterns in different contexts. A process that results in the identification of gaps and unexploited potential that can be used for the Cypriot refugee pattern language for community building. A multiscalar approach refers to the activation and formation of the Cypriot refugee community from a territorial level to a local-regional level of the spatial design interventions to transition refugee settlements to neighborhoods.

Therefore, the analysis conducted on the social and spatial characteristics of the refugee settlements will result in a selection of refugee settlements with specific characteristics as key locations for the strategic interventions. Subsequently, based on the selected areas, the strategy will be formed. The strategy, opposing to past strategies referring to static images of the past (Fig. 18), refers to the engagement and empowerment of the multilayered refugee community.

The proposed design guidelines through spatial patterns are crucial for improving the liveability conditions of the refugee settlements in the short term, in terms of community practices and reminders of the community's past. The contribution to the spatial remembrance will be endorsed by action on community building.



Fig. 18: Primary school notebook with the logo "I do not forget" on the top and images from the occupied part of Cyprus before the Turkish invasion. Part of the Republic of Cyprus campaign on promoting the memory of the north part of Cyprus before 1974. Source: <https://parathyro.politis.com.cy/2020/11/mathima-istorias/>

3.2 Methods Used

Literature review

Conceptualize the refugee settlements and indicate their underlying potential for community building

How? Analyze governmental reports, policy documents referring to the refugee identity and the governmental refugee settlements, and literature referring to memory science, conflict environments, and community building.

Interviews/Observations

Reveal the current situation at the refugee settlements by understanding how people use the space and feel about it.

How? Street interviews of residents and transit people, on-site observations of various refugee settlements on how people use the public spaces, streets, and their visible private space (front gardens and building front view)

Mixed Media Analysis

Understand the life histories and heritage of the refugees to indicate the essential memory reminders for the social group. Highlight the living condition inequalities and verify them with other analysis methods.

How? Use existing relatively recent and old documentaries and news articles about the refugee settlements and the refugees.

Stakeholder Analysis

Identify critical stakeholders for the scenario building to be combined with the socio-spatial dimension and result in community building.

How? Identify the key stakeholders that already operate or have the potential to operate on multiple scales and investigate their role, power, and interest. Understand conflicting/cooperating relationships among actors and stakeholders.

Statistical Analysis

Illustrate the social characteristics of the refugee settlements residents compared to the residents of the rest of the urban districts.

How? Use the demographic data of the statistical service from different years.

Socio-Spatial Analysis

Analyze the social consistency of the refugee neighborhoods compared to the rest of the urban districts and evaluate their level of segregation. Depict signs of spatial remembrance.

How? Analyze the demographic data spatially and compare it with the space syntax analysis and amenities.

A Comparative Case Study Analysis

Analyze, compare, and identify gaps in existing paradigms of memorialization strategies and their linkage with community building. This

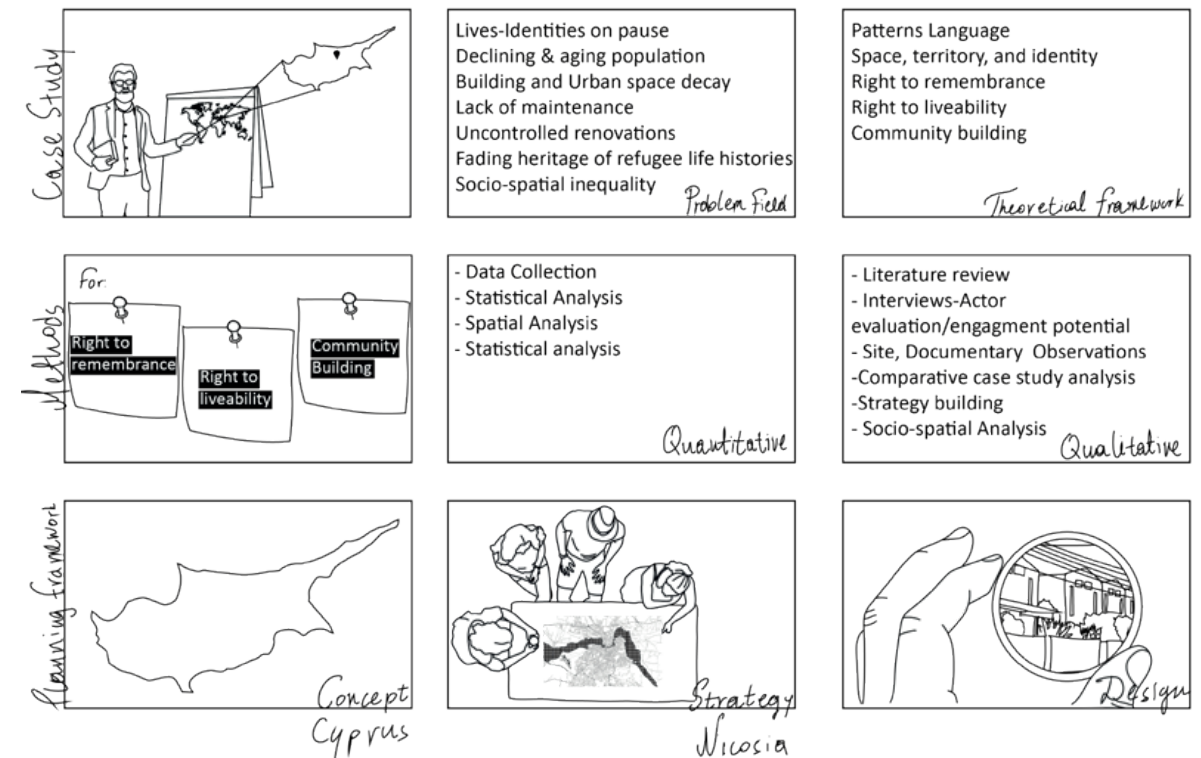


Fig. 19: Methodology overview diagram

comparison will then be used to create a memorialization strategy in the context of the refugee settlements in Cyprus.

How? Use three existing paradigms for the analysis, reflect on the contested environments and form a strategy in the Cyprus context.

Strategy Building

Form a community-led spatial planning strategy to ensure the landscape memorialization while securing the liveability of the landscape.

How? Combine results from the spatial analysis and the comparative case study analysis, the interviews, and results from other methods used to design the strategy for the refugee settlements.

3.3 Research Questions & Methods Used.

Topic	Question	Method	Data	Milestone
Spatial patterns	- What did the Cypriot refugee identity evolve through time and how was its relationship with the refugee settlements?	LR - Literature review MM- Mixed media analysis	News Articles, Reports, policy documents, documentaries on refugees and refugee settlements Data collected from fieldtrip	Illustrate the complexity of the Cypriot refugee multiple profiles
	- What is the current state of the refugee settlements in terms of liveability?	SI - Street interviews/ O observations		
	- What are the social characteristics and the spatial patterns of the refugee settlements and how do they differ from other urban neighbourhoods' socio-spatial patterns in the region?	ST - Statistical analysis SP - Socio-spatial analysis	Demographic data from statistical service of Cyprus Department of Lands and Surveys, statistical service of Cyprus	Define level of socio-spatial segregation of the refugee settlements compared to other urban districts.
	- How can the right to remembrance be spatialized conceptually and which spatial factors influence the right to remembrance seen theoretical notions in the fields of psychology and spatial design?	LR - Literature review AS - Stakeholder analysis S - Spatial analysis	Literature referring to memory science, conflict environments and community building Expert and community representatives' interviews Data from fieldtrip site visits and Department of Lands and Surveys, statistical service of Cyprus	Conceptualize refugee neighbourhoods, unfold the underlying conflict of the Cypriot refugees living in the refugee settlements.
	- Which spatial patterns are expressions of the refugee memories in the refugee settlements in Cyprus?	LR - Literature review MM- Mixed Media analysis	News Articles, Reports, policy documents, documentaries on refugees and refugee settlements	Indicate the spatial patterns that can contribute to a biographical landscape
Community Building	- How can the planning process build a community in a conflict environment?	CC - Comparative case study analysis	Existing paradigms of memorialization strategies and their linkage with community building	Analyse and evaluate and identify gaps on international case studies to build on a planning process for the Cyprus case
	- What is the degree of place attachment of their residents? What factors are responsible of their decay and what have the potential to contribute to community building?	I - Interviews /observations SB - Strategy building	Data from fieldtrip Combine data results from other methods and comparative case study analysis	Analyse the different perceptions of the refugee settlements and identify the elements for the planning strategy

C
Cyprus
Strategy Vision

N
Nicosia
Strategy Integration

KL
Key Locations
Design Interventions

Fig. 20: Methodology for research questions diagram



4 . C o n t e x t u a l A n a l y s i s o f t h e R e f u g e e S e t t l e m e n t s

The chapter expands on the formation and development of the Cypriot refugee community and the evolution of the government housing plan in the first two subsections. Then, the analysis of the refugee settlement positioning and spatial characteristics in Nicosia's context is followed by the identification of repeatable spatial characteristics in the refugee settlements through four case studies.

Fig. 21: Ethnomartyras refugee settlement to the within Nicosia's urban tissue, DLS Orthophotos 2014, Retrieved from: <https://eservices.dls.moi.gov.cy/#/national/geoportalmapviewer>

4.1 Cyprus, Displacement & Refugee Community

The current thesis project focuses on the refugee community in Cyprus and the governmental refugee settlements still housing the Greek Cypriot refugees. Therefore, the analysis introduces and expands on the context of the evolution of the two main ethnicities of Cyprus, the Greek Cypriots, and Turkish Cypriots, in terms of society and space. By creating a representative image of the current state of the refugee community, understanding the creation and evolution of the refugee community and the governance scheme of refugee settlements is necessary.

Cyprus constitutes an island with a complex society that influences its territory and vice versa. The strategic location of Cyprus in the Eastern Mediterranean was the leading cause of the deep colonization of the island through the centuries and the frequent interface for Cypriots with Asian, African, and European cultures and civilizations. This has caused multiple territorial and societal conflicts on the island, with the last one still being unsolved.

In 1571 Cyprus was conquered by the Ottoman empire. Consequently, the Ottomans ceded the island to Great Britain in 1878, which annexed the island officially in 1914. Cyprus achieved independence in 1960 after the agreements signed in Zurich and London in February of 1959 between the representatives of the United Kingdom, Greece, Turkey, and the two Cypriot communities, Greek Cypriots and Turkish Cypriots. The constitution of 1960 provided for the participation of both communities in all the institutions of the new republic.

Shortly after the independence of Cyprus in 1960, the tensions among the Greek Cypriot majority of approximately 80% and the Turkish Cypriot minority of 18% began (Kyle, December 1997). In 1974, the invading Turkish forces drove an ethnic separation between Greek Cypriots and Turkish Cypriots. Approximately 200 000 Greek Cypriots were displaced.

Cyprus Society & Contemporary Conflict

Conflicts among the two communities at the beginning of 1964 led the United Nations Security Council to dispatch a United Nations peace-keeping force (UNFICYP) in March 1964. Then, a decade after this event, following a coup d'état by a junta in Athens and ultra-nationalist Greek Cypriots in 1974, Turkish armed forces intervened and occupied the northern third of the island. (Balexert, 2005))

After the invasion, Greek Cypriots living in the northern part of Cyprus fled to the south, and Turkish Cypriots residing in the south part to the north of the island. Later, in 1975, the northern part of the island, occupied by the Turkish army, was proclaimed the so-called Turkish Federated State of Cyprus, which was in 1983 declared as the so-called Turkish Republic of Northern Cyprus, recognized only by Turkey and characterized as an illegal entity by the Security Council of the UN. It was inevitable that the declaration of independence of the northern part of the island drove the two communities even more apart and thus made intercommunal dialogue even more challenging.

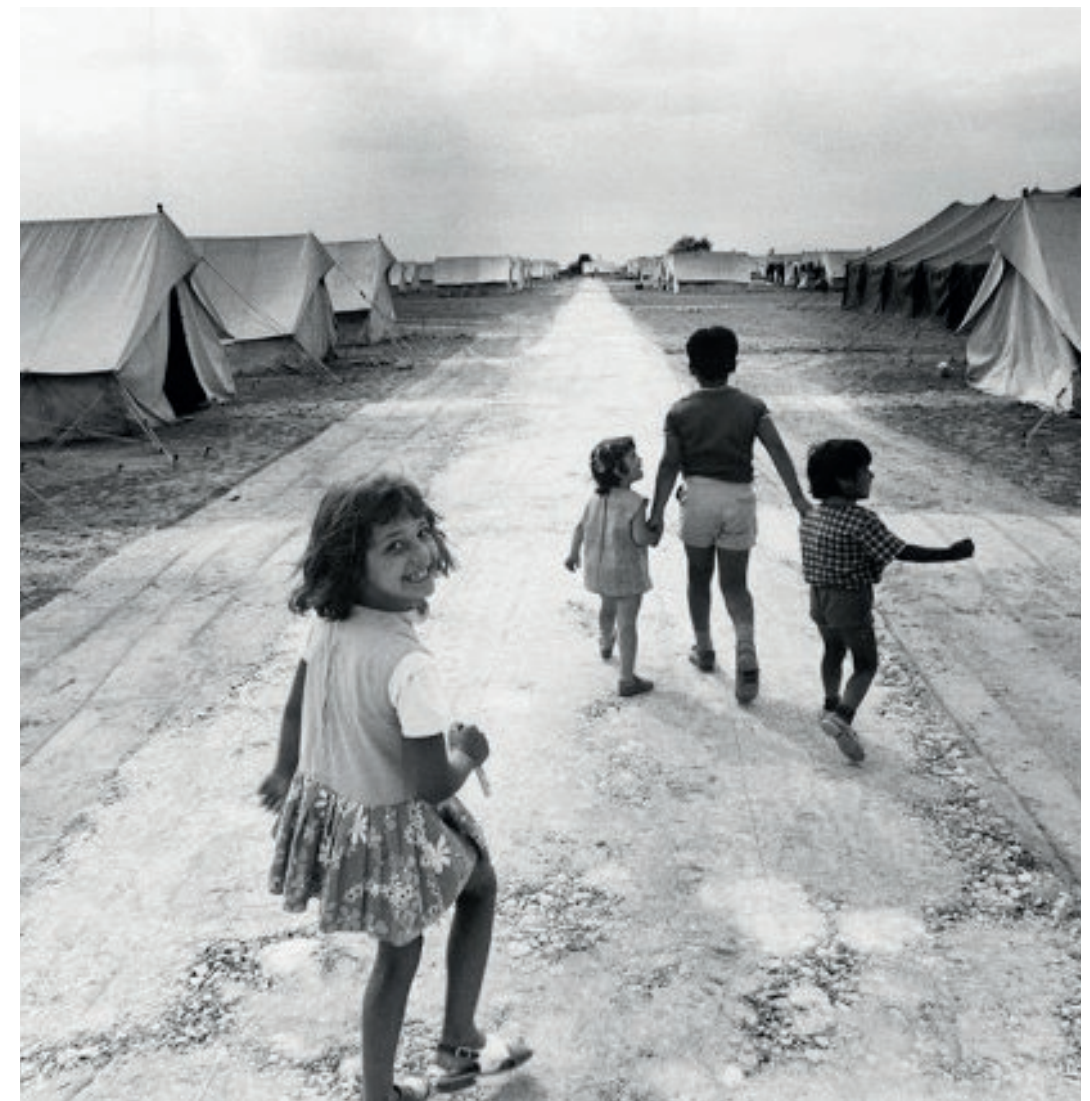


Fig. 22: Greek children, Strovolos camp planned for 1,600 people, Cyprus, 1974. Source: © Jean Mohr, Musée de l'Elysée

Inside the Cypriot civil society, refugees retain their identity through the refugee associations. The refugee associations maintain contact with old towns and village residents in Cyprus and abroad, in Britain, Australia, the United States of America, and New Zealand. These associations sponsor principally initiatives related to sports and culture, targeted at maintaining old social links. The refugee associations have also been involved in some activities which suggest that they will retain a long-lasting existence in the south even if the right of return is guaranteed. A vibrant example of this is the refugees of Ayios Epiktitos, a village in the occupied Kyrenia District, and the village of Kythrea in the occupied north. They decided to build a church that replicates the one they left behind. Therefore, in many cases, the refugee associations engage with the remaining first refugee generation among the second and third and display enthusiastic endorsements of the image of Cyprus before the invasion and maintain firm demand for their right of return.

Refugee Identity & Internal Displacement

Since 1974 nearly a quarter of the inhabitants of Cyprus – 210,000 ethnic Greek and Turkish Cypriots – have been internally displaced. This marks the longest-standing internal displacement condition in Europe. The internally displaced Greek Cypriots have organized a new life in southern Cyprus, and so have Turkish Cypriots in the island's northern part. Nonetheless, displaced Greek Cypriot communities in the South continue to voice their deep desire to return and

recover their lost properties in the North.

During 1963–64, approximately 25,000 Turkish Cypriots comprised one-fourth of the Turkish Cypriot community, and seven hundred Greek Cypriots were displaced. Of the internally displaced of 1963–34, about 1,300 Turkish Cypriots returned to their homes by 1970; the rest remained displaced until 1974 when events headed to Cyprus's current de facto division. The resulting dislocation of Cypriots was gigantic compared to the island's size and its total population at the time. Almost 30% of the Greek Cypriot community, consisting of 142,000 Greek Cypriots, were displaced from the northern to the southern part of the island, and nearly 40% of the Turkish Cypriot community, 45,000 Turkish Cypriots, were displaced from the south to the north (AYLA GÜREL, 2006).

The vast majority of the Greek Cypriot inhabitants from the northern region have been displaced due to the Turkish military action in 1974. Most of the Greek Cypriot population in the north displaced during 1974 (190,000 persons) absconded their homes in the word of the Turks' approach. A substantial number of Greek Cypriots who remained in the north of Cyprus after the arrival of the Turkish troops were relocated because of various measures of displacement. At the same time, about 50,000 to 60,000 Turkish Cypriots fled north, including people who had been displaced earlier (Balexert, 2005). Approximately 75 % of the displaced Cypriots were of rural background and lost their living subsistence) because of the displacement. Much of the displaced population settled in the outskirts of the cities of Nicosia, Larnaca,



Fig. 23: Nicosia city center 2020. The barrels mark the road's end and the buffer zone's border. Time has led the people to appropriate the space by placing a bench and plants in front of the barrels where nature claims the space on the side of the buffer zone.

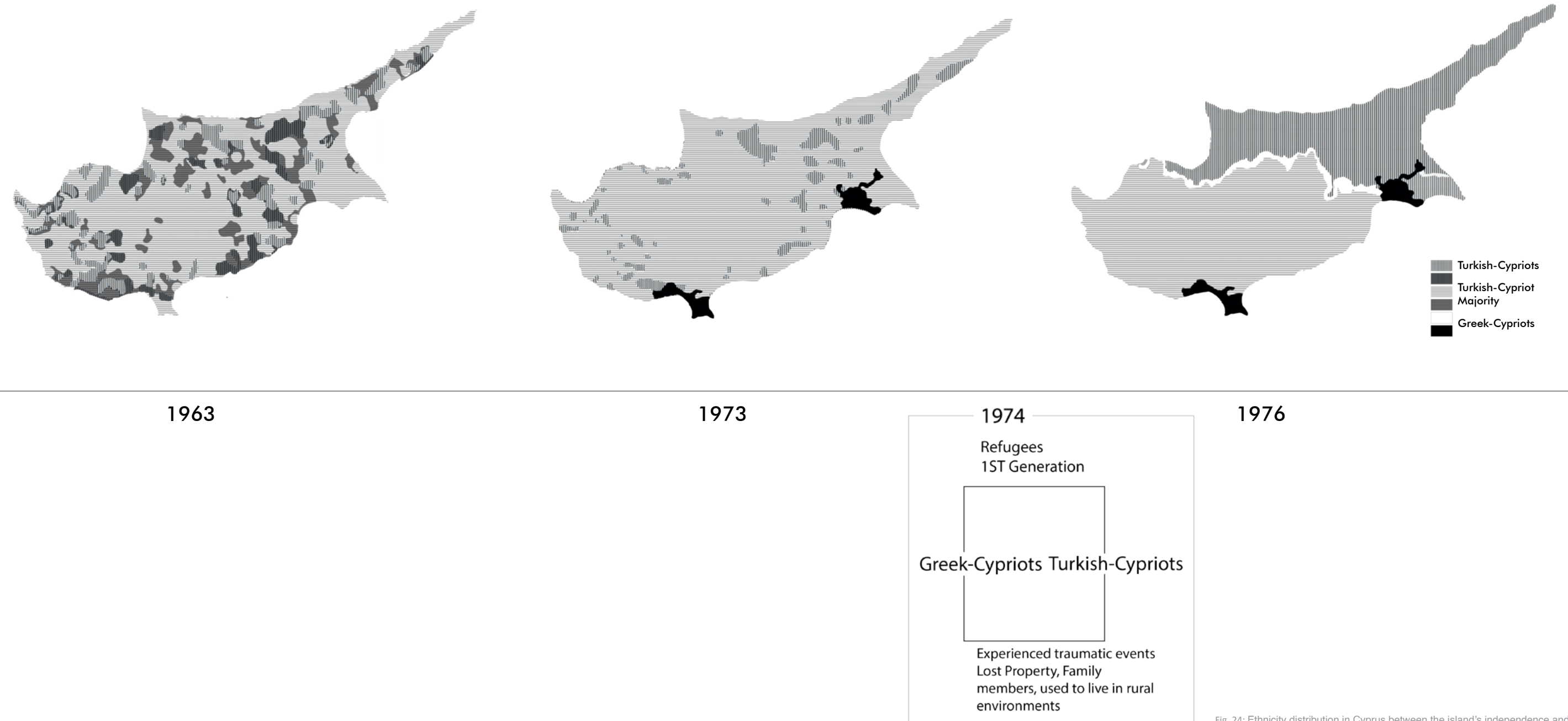


Fig. 24: Ethnicity distribution in Cyprus between the island's independence and 1974, the Turkish invasion. Source: Based on https://en.wikipedia.org/wiki/Demographics_of_Cyprus, illustrated by the author

and Limassol. The displaced Greek Cypriots did not occupy the villages abandoned by the Turkish Cypriots regardless of their rural origin. This resulted in villages remaining deserted in the western part of the island. The island's overall population has gradually increased since 1974, and the population density of the southern part of the island is now twice as much as the density in the north. In the meantime, Turkey has brought a significant number of settlers from mainland Turkey to the occupied part, which presently constitutes the majority in the occupied area.

The refugee settlements were created to house Greek-Cypriot refugees on the outskirts of the cities. The creation of the settlements was divided into three phases. During the first phase, large low-cost settlements of five hundred to a thousand housing units were created. The other two phases comprised many settlements with fifty to two hundred housing units. The purpose of the settlements was to house as many refugees as possible in a short period until a permanent solution among Cypriots was found. During the implementation phases of the state's refugee settlements, a new social identity was constructed, the Cypriot refugee identity. The newly established social group formed an association that soon started acting as an institution advocating its rights.

Since December 1999, Cypriot internally displaced persons are no longer incorporated into the UNHCR statistics for IDPs of concern for the organization. Today, most Cypriot refugees are fully integrated into society and have no humanitarian needs. On the contrary, the refugee

settlements face vital signs of decay and depreciation, where many refugees still live there. They still form monofunctional clusters that attract urban development around them through the years. The uncertainty of the territorial future in Cyprus constitutes the main barrier to ensuring an inclusive and cohesive urban environment in the refugee settlements. The lack of planning and fulfillment of the demands of the refugee associations from the urban housing and planning department created a lack of sense of belonging of the residents with their neighborhoods through the years.

Ethnicity & Property Rights

The response to the properties of the Cypriot refugees differs from the Greek Cypriots and Turkish Cypriots. For the first, once the problem of temporary accommodation was solved for the displaced refugees, the government implemented housing schemes and other social measures to assist the displaced population. The Government also undertook the repair and maintenance of some old Turkish Cypriot houses, which were then handed over to displaced families for temporary accommodation until they were returned to their legal owners. The Cyprus Government had set up the Special Relief Fund to finance the various relief programs for the displaced. More specifically, from 1974-to 1978, each destitute displaced family was eligible for assistance in kind and allowances according to the family's size and needs (Republic of Cyprus, Press and Information Service 1999, pp. 184-168).

Turkish Cypriot properties in the territory under the

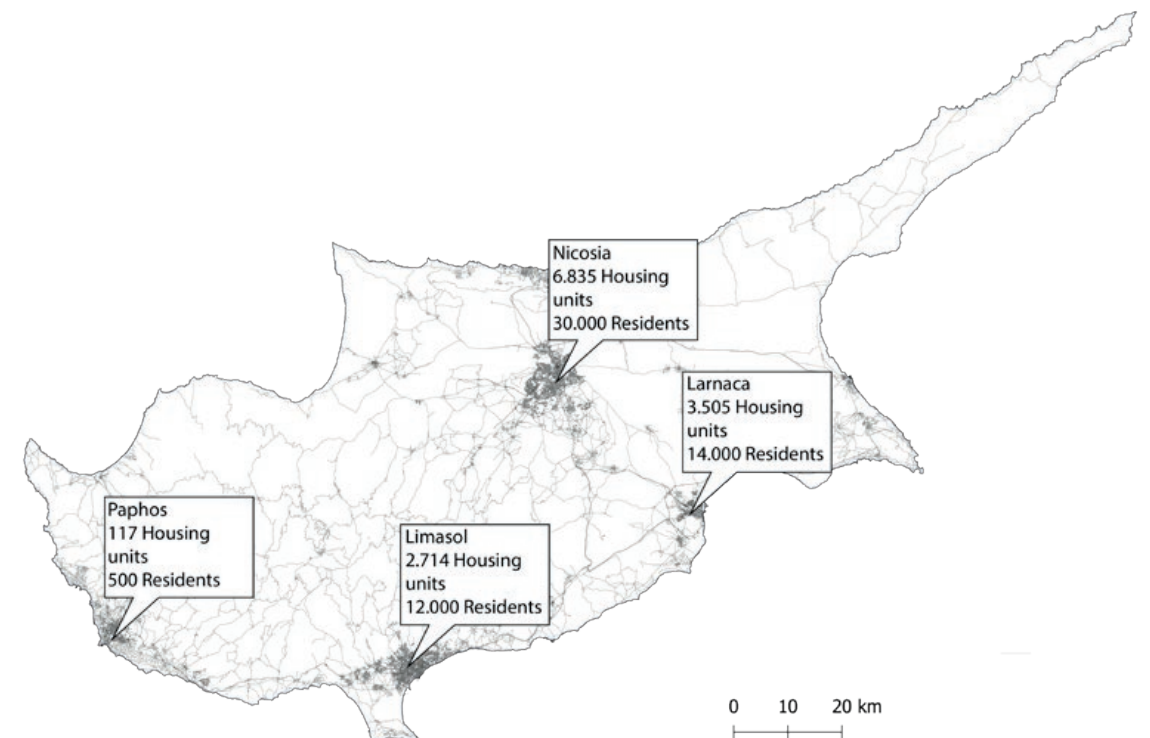


Fig. 25: Refugee housing unit and Greek Cypriot refugee distribution among cities. Source: Data based on QGIS, illustrated by the author

control of the Government of Cyprus are administered by the Directorate for Turkish Cypriot property management (property temporary guardian), an authority coming under the Minister of the Interior. Turkish Cypriots settling in the south or emigrating abroad before 1974 are eligible to retrieve their property. On the other hand, this is not the case for the displaced Turkish Cypriots who have settled in the island's northern part. They still legally own their assets but are not entitled to dispose of them (CoE June 2003).

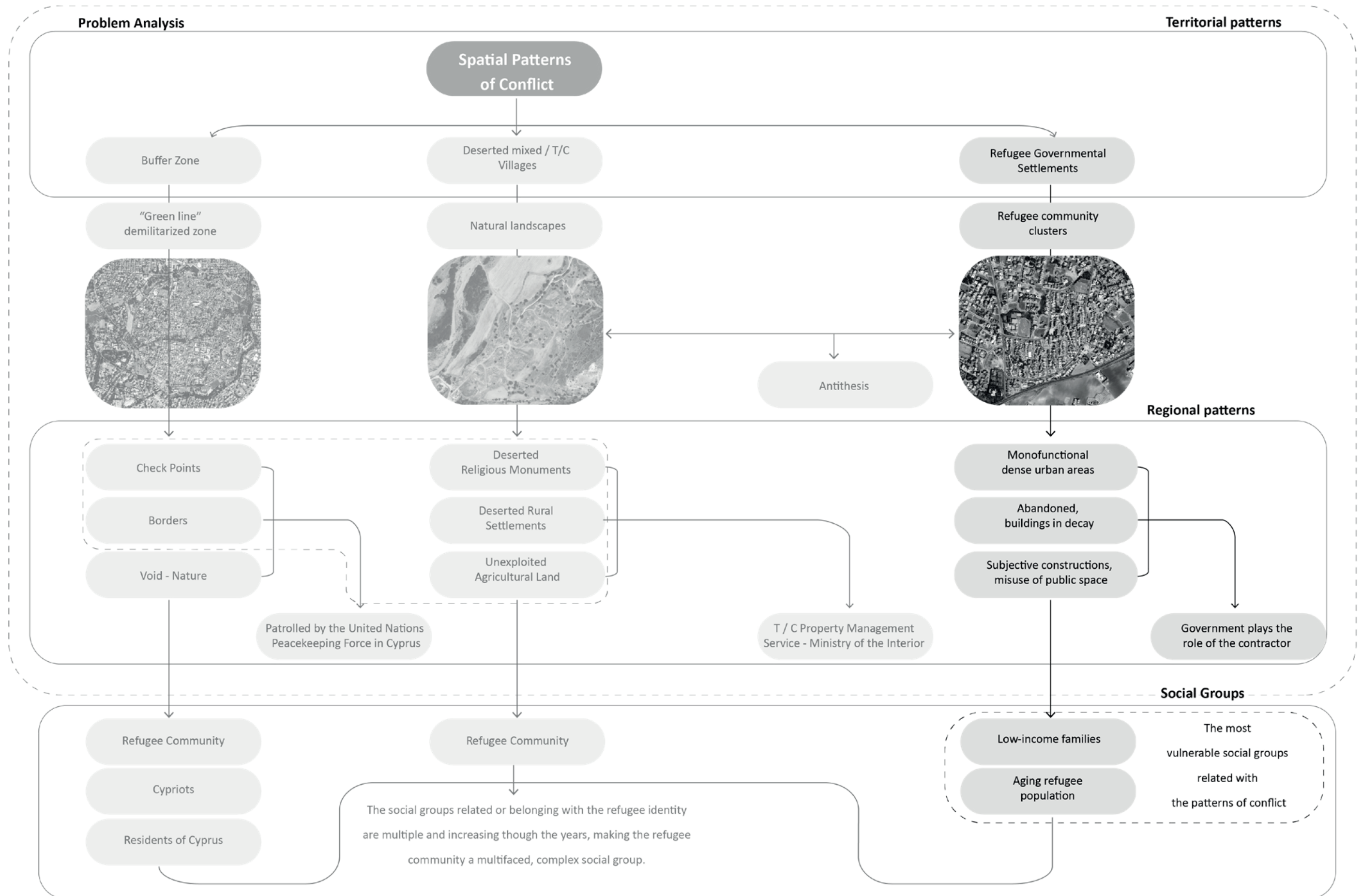


Fig. 26: Cypriot patterns of conflict and research positioning

4.2 Refugee Settlements Over Time

The urban environment of Nicosia was chosen as the city with the highest concentration of refugee settlements and housing units. Nicosia includes 21 refugee settlements, which differ in size and location. All Refugee Settlements have common characteristics related to their housing typologies and neighborhood structure; thus, they consist of an identifiable pattern in urban space.

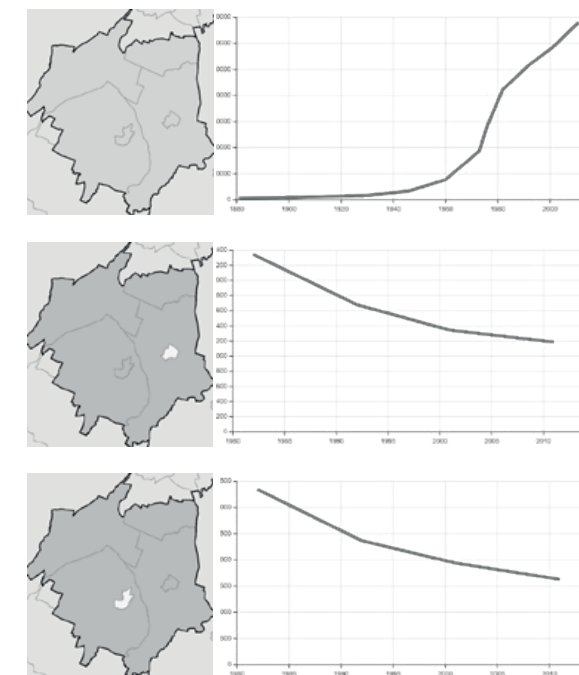
The need to ensure adequate housing for the population was undoubtedly a global social phenomenon that, as such, has economic and political implications. Even in the most organized societies, housing is a problem that needs constant treatment, provided that the citizen has now turned his need for housing into a right and a demand.

Until the first years of the operation of the Republic of Cyprus, Cypriots faced the need for housing, mostly individually or with the help of their families. Government activity in this housing sector was limited to constructing a few dozen low-cost houses each year for the housing needs of the very low-income classes, which were granted through a rent purchase plan (such as the Kaimakli area). However, in 1972, in cooperation with the United Nations, through assessing the housing problem in Cyprus, the Government began to adopt a more substantial housing policy, which aspired to reduce the housing problem to the greatest possible extent by the end of the last century. This housing policy significantly increased the annual construction of houses for low-paid classes (rent purchase plan). The implementation of this program was blocked by the Turkish invasion of 1974, with severe consequences in all sectors

(economic, political, and social).

One-third of Cyprus' population (200,000 inhabitants) was forcibly displaced, where it desperately asked to be temporarily housed in the hope of a short return. Most refugees are temporarily housed in makeshift premises, unfinished buildings, with relatives and friends. The huge problem caused by the mass deportation created the need to set up the Care Service to deal with the issues of refugees. The first activity of the "Merimna" Service was the accommodation of refugees in camps from tents in various parts of Cyprus. These camps provided only basic living facilities and sanitation.

In 1975 the Government adopted a more specific housing policy and defined the Ministry of Interior as the body of government housing programs. In the effort to solve the urgent housing problem of the refugees, in the first phase, different housing programs were adopted. These consist of the Self-housing plan on Government plots, the Self-housing project on privately owned parcels, the Improvement of residences in abandoned Turkish Cypriot villages and city districts, and the Construction and management of Government Settlements.



Refugees 1ST Generation
Refugees 2ND, 3RD Generation

1974

Greek-Cypriots
Refugees

Internally Displaced
in refugee camps

Remained in tents
for 6-12 months

1975-1982

Relocated in refugee
settlements with
their families / self
housing scheme

Many locations of
the camps became
the locations of the
refugee settlements

2021

New generations of
refugees, moving out
of the settlements and
renting/selling the
refugee property.

Refugee settlements
have become urban
neighbourhood as
cities have evolved
around them

First generation
refugees (elderly)
remaining in the
settlements, facing
mobility problems

Settlements are in
decay, no long term
planning/mainten-
ance support

Government
Housing Policy

1960 Independence of Cyprus

Housing need solved
individually/with the help of family
+few dozens of low-cost income
houses build by the government and
offered through rental-buying
scheme

1972 Government & United Nations
Evaluate Cyprus to Create a Housing
Policy

Town and country planning law was
introduced (including an Island Plan,
local plans, and area schemes)

1974 The Turkish invasion in Cyprus
led to the cancellation of the town
and country planning law

Housing urgency for more than
200.000 refugees

1975 New planning law for refugee
housing urgency

Phase A Large independent
settlements, 500-1000 housing units
Phase B,C,D,E settlements with up to
400 housing units

1993 800 new housing units to replace
houses with structural problems
mainly from the first phase

93 new lifts installed in apartment
buildings in government
settlements

2014

22 new lifts installed in apartment
buildings in government
settlements

2021

22 new lifts installed in 7 years, "this
is the appreciation of the difficulties
experienced by the refugee world,
the elderly and the disabled"-
Chairman of the Committee for
Refugees, Nikos Kettiros.

2022 total of 69 governmental
settlements with 14.000 housing units

Approved schemes with unknown
agendas - 402 new housing units

*The Housing and Planning
Department is responsible
for the management and
maintenance of
Government Settlements
but also for the landscaping
of green spaces and parks,
the construction of parking
lots and the repair of roads
and sidewalks in them.

Fig. 27: Greek-Cypriot refugee identity evolution in relation to Cyprus housing plans. Source: Data for the housing plans were retrieved from Cyprus's Housing and Planning department.

The Refugee Settlements in Nicosia

A total of twenty-one government refugee settlements with 6,595 housing units and twenty-three self-housing settlements of refugees on government land were created in the Nicosia district until October 1987, with 2,595 plots.

Government Refugee Settlements in Nicosia:

1. Strovolos II with 730 residential units, 2. Strovolos III with 577 residential units, 3. Pano Lakatamia with 1,024 residential units, 4. Agios Eleftherios (Latsia) with 796 residential units, 5. Kaimakli with 47 residential units, 6. Agios Mamas with 455 residential units, 7. Agios Nikolas (Pallouriotissa) with 69 residential units, 8. Agia Varvara (Pallouriotissa) with 102 residential units, 9. Agios Georgios (Pallouriotissa) with 245 residential units, 10. Plati Aglantzias with 356 residential units, 11. Agios Pavlos I and II with 257 housing units, 12. Athalassa with 256 residential units, 13. Red with 444 residential units, 14. Apostolos Loukas (Latsia) with 126 residential units, 15. Apostolos Andreas (Latsia) with 236 residential units, 16. Chrysospiliotissa with 153 residential units, 17. Geri with 16 residential units, 18. Archangel Michael with 368 residential units, 19. White with 224 residential units (Tseri), 20. Gerani with 44 residential units, 21. Tacht-El-Kale with 70 residential units

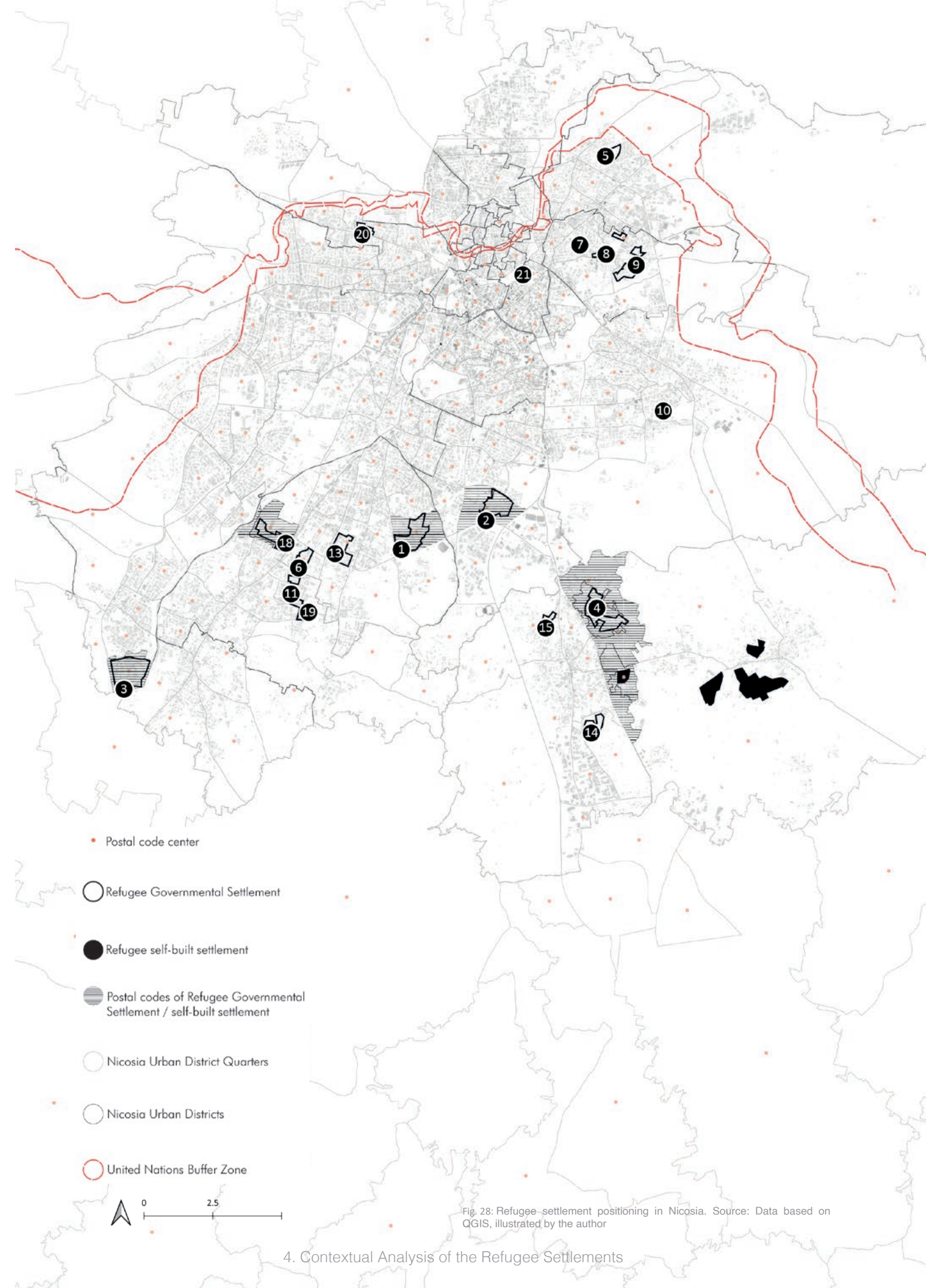


Fig. 28: Refugee settlement positioning in Nicosia. Source: Data based on QGIS, illustrated by the author

Refugee Settlement Transforming Landscape

The current urban tissue of the refugee settlement locations is a result of a violent landscape transformation that has undergone from the period of 1974-to 1991. For the needs of the analysis of the Cypriot refugee settlements, distinct typologies are chosen. Therefore, to illustrate a holistic image of the refugee neighborhoods, the selected settlements differ in land area, distance to the city center, and type.

The orthophotographs depict the extent of urbanization of the landscape and its rate of change. In 1963, three years after the independence of Cyprus, the landscape of the vast majority of the refugee settlement location was farmland, including sparsely small buildings serving the needs of the farmers. The same landscape thirty years later, in 1993, depicts signs of urbanization and infrastructure development. The once farmland housed the Greek-Cypriot refugees 'temporarily' in the organized neighborhoods, a rural population in a once rural landscape. Over the following decades, the city evolved around the refugee settlements, binding the urban tissue of the infrastructure and refugee settlements with the rest of the city.

The street and parcel configurations have been formed to reveal aspects of the residents' living conditions and the settlement's function in each case. In all cases, analyzed parcels are smaller than the adjacent built environment. An indication of a denser built environment includes excessive use of dead-end roads. As a result, the morphological characteristics of the large settlements created hidden neighborhoods from the rest of Nicosia, with a strong sense of an individual

community as their street network prevented interaction with other mobility flows. The built environment of the refugee settlements is distinguishable in all cases due to the building repetition of the noticeably smaller constructions.

The enormous refugee settlements that form distinct entities in the urban tissue of Nicosia, even if isolated from the surroundings, develop attractor centers for urbanization. On the contrary, smaller refugee neighborhoods closer to the city center have blended with the urban environment over the years, making their boundaries blur. Consequently, landscape evolution through time, along with the current infrastructure layers, unfolds and connects the current spatial patterns with their past and indicates potential, desirable, and adverse directions for their possible spatial future.

1963 The rural landscape

Fig. 29: DLS Orthophotos 1963, Data retrieved from: <https://eservices.dls.moi.gov.cy/#/national/geoportalmapviewer>



1993 Transition to Urban

Fig. 30: DLS Orthophotos 1993, Data retrieved from: <https://eservices.dls.moi.gov.cy/#/national/geoportalmapviewer>



2014 Enclosed by the City

Fig. 31: DLS Orthophotos 2014, Data retrieved from: <https://eservices.dls.moi.gov.cy/#/national/geoportalmapviewer>



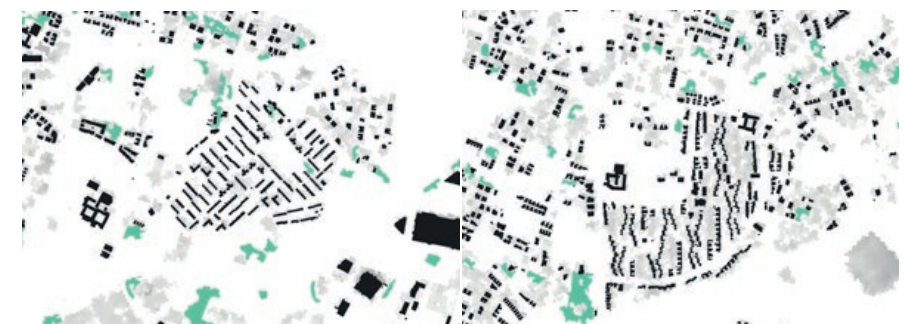
Street Configuration & Parcel

Fig. 32: Refugee settlement Cadaster Data retrieved from: <https://eservices.dls.moi.gov.cy/#/national/geoportalmapviewer>



The Built Environment & High Vegetation Clusters

Fig. 33: Refugee settlement buildings and high vegetation. Data retrieved from: <https://eservices.dls.moi.gov.cy/#/national/geoportal-mapviewer>, <https://land.copernicus.eu/local/urban-atlas>



1963 The rural landscape



1993 Transition to Urban



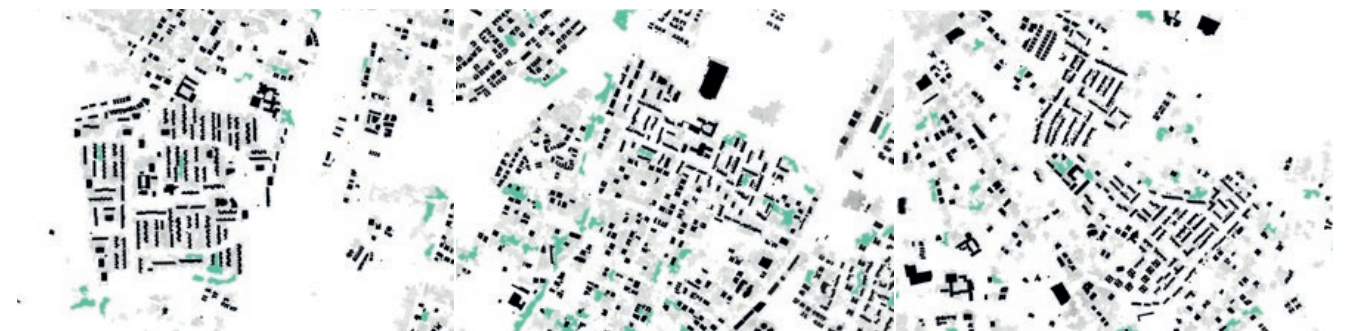
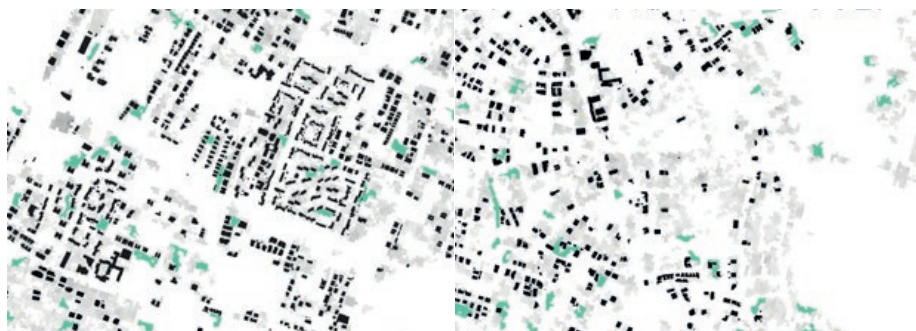
2014 Enclosed by the City



Street Configuration & Parcel Morphology



The Built Environment & High Vegetation Clusters



4.3 The Current Image of Nicosia

It was observed through the local newspapers that many news titles during recent years promote an image of the refugee settlements as places of abandonment, where the older population lives and where its residents seek to escape. In my perspective, as a resident of Nicosia, the claim that a more aging population inhabits the refugee settlements seems valid as most of the refugee settlement residents I met were refugees above the age of sixty-five. There were also complaints and public discussions that the settlement blocks of houses lack lifts, which is a big problem for elder inhabitants. The aspect that seemed controversial in my eyes was that an article from September 2021 stated that many residents were for sale, therefore claiming that many housing units were empty and in decay. This article seemed divisive with my experience passing through the refugee settlements. From my perspective, the settlements seemed as inhabited as any other neighborhood in Nicosia, as the number of parked cars in the streets was the same as in the rest of Nicosia. Therefore, I made some conclusions about the refugee settlements by comparing the news titles with the demographic data.

Urbanization is a global phenomenon. The condition under which the built environment is planned and created varies. In the case of Nicosia, the urbanization is indeed influenced by the unique spatial condition, the buffer zone, which divides the city in two, crossing the city center since 1974. The impact of this condition is visible through the current evolution of Nicosia. The areas with the highest percentage of continuous urbanization are spread through Nicosia, located close to highly accessible axes.

The locations of the refugee settlements, in their majority, are areas of at least 80% continuous urbanization. Though they are highly urbanized, they differ from other highly urbanized areas. The refugee settlements consist of organized neighborhoods with row houses, semidetached, and, in some cases, detached homes and a couple of three to four-story apartment buildings; therefore, they form a family-oriented environment. Other highly urbanized areas consist of a mix of detached houses and three to five-floor apartment blocks or are parts of historic urban cores. Consequently, the refugee settlements are not the only highly urbanized areas of Nicosia, but they provide a friendlier and closer to nature-oriented lifestyle.

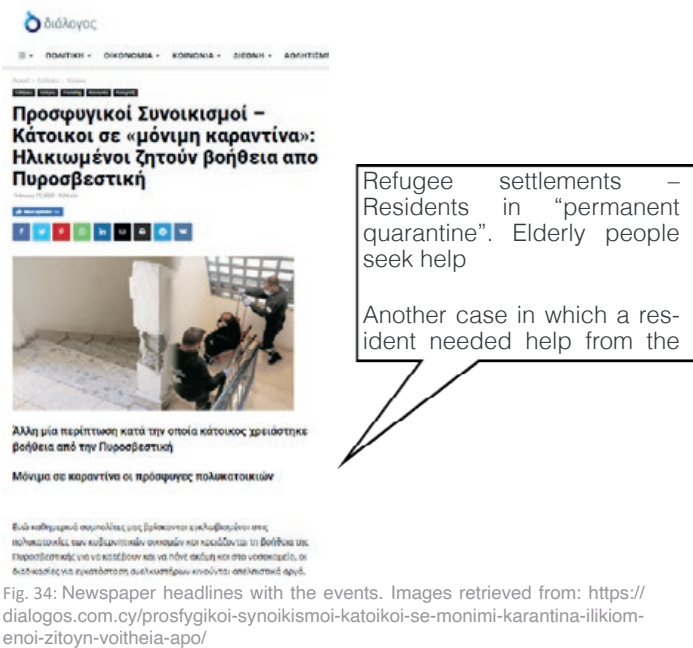


Fig. 34: Newspaper headlines with the events. Images retrieved from: <https://dialogos.com.cy/prosfygikoi-synoikismoi-katoikoi-se-monimi-karantina-ilikiomenoi-zitoun-voithia-apo-pyrosvestiki/>

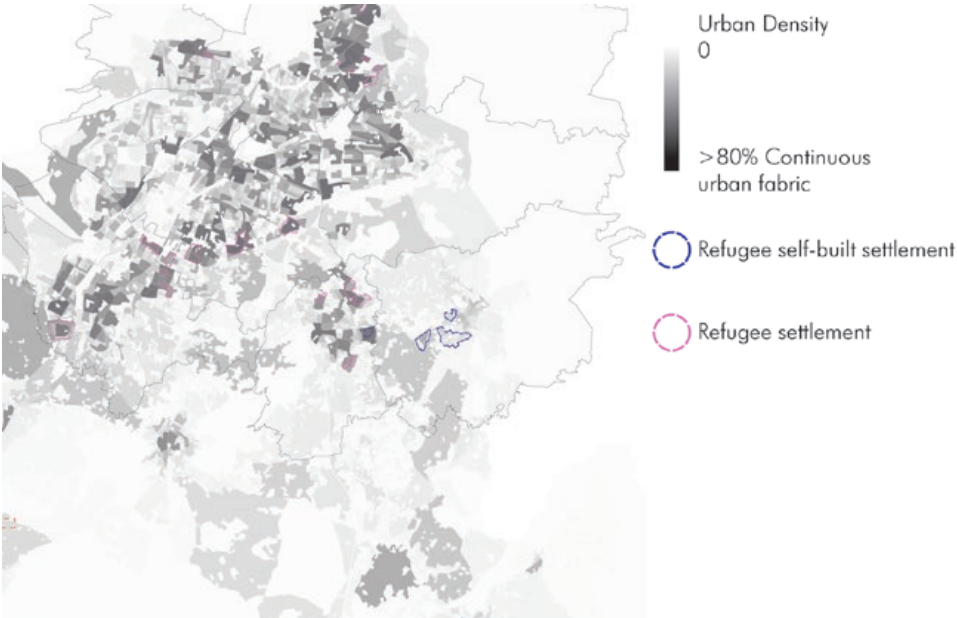


Fig. 35: Urbanization in Nicosia, Data retrieved from: <https://land.copernicus.eu/local/urban-atlas>

Illustrating The Refugee Community Through Demographics

The statistical analysis per urban districts of Nicosia's municipalities results show that the large refugee settlements in Nicosia consist of highly dense urban environments than the rest of the city. For the thesis statistical analysis, only the eight government refugee settlements are used as they are the most identifiable element in the demographic dataset. This is because these settlements are the largest in several housing units as they were created during the first phase of the refugee housing project. Today, these eight settlements consist of the cores of six quarters of Nicosia.

They consist of much smaller quarter units than other quarters and have a higher density in terms of land area. The level of population dependency of the refugee settlements is much more elevated, which is also endorsed by the fact that the mean age of the settlement's residents is ten years greater than for the rest of the city.

Vacant buildings are an aspect that needs further research to conclude whether it is related to the refugee settlements as the correlation between population above 65 years old and empty buildings did not depict any direct correlation. This might be because short-stay residents such as Airbnb are also included in this category, or the lack of lifts in many cases may also be a reason.

Generally, statistical analysis reassures many aspects of the image created from the media, but further research is needed to draw more accurate conclusions. Such research may include street interviews of the residents and further elaboration of the statistical analysis among spatial analysis,

the residents' citizenships, and property mortgages and transfers statistics.

For sale many apartments of the settlements



Fig. 36: Newspaper headlines with the events. Images retrieved from: <https://philnews.com/oikonomia/kypros/article/1286134>

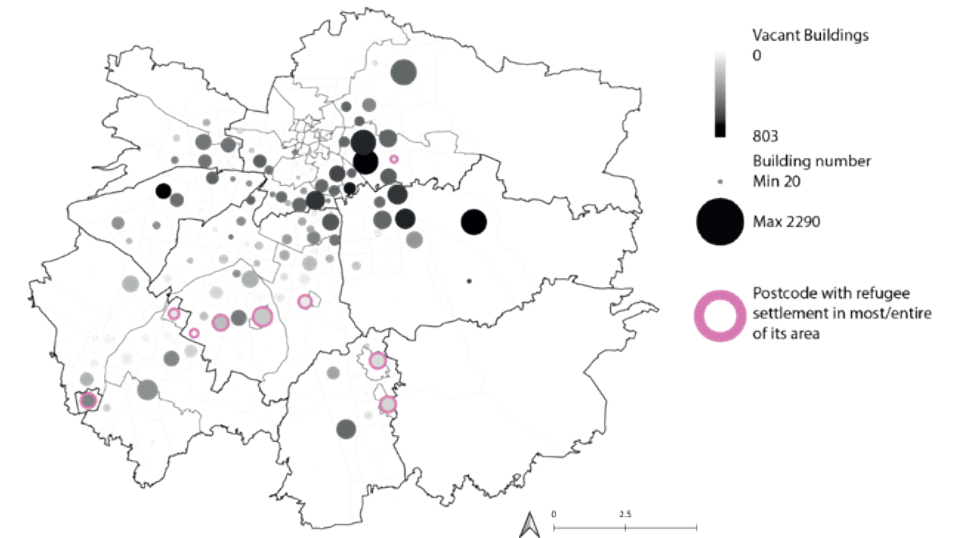


Fig. 37: Vacant building distribution in Nicosia. Data retrieved from: <https://www.data.gov.cy/search/type/dataset>

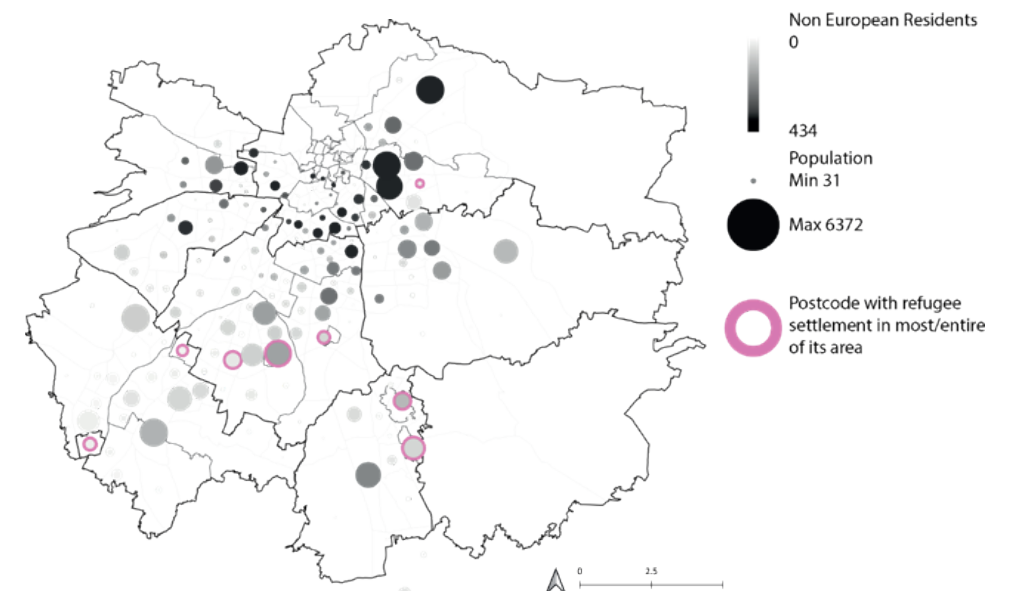


Fig. 38: Non-European resident distribution in Nicosia. Data retrieved from: <https://www.data.gov.cy/search/type/dataset>

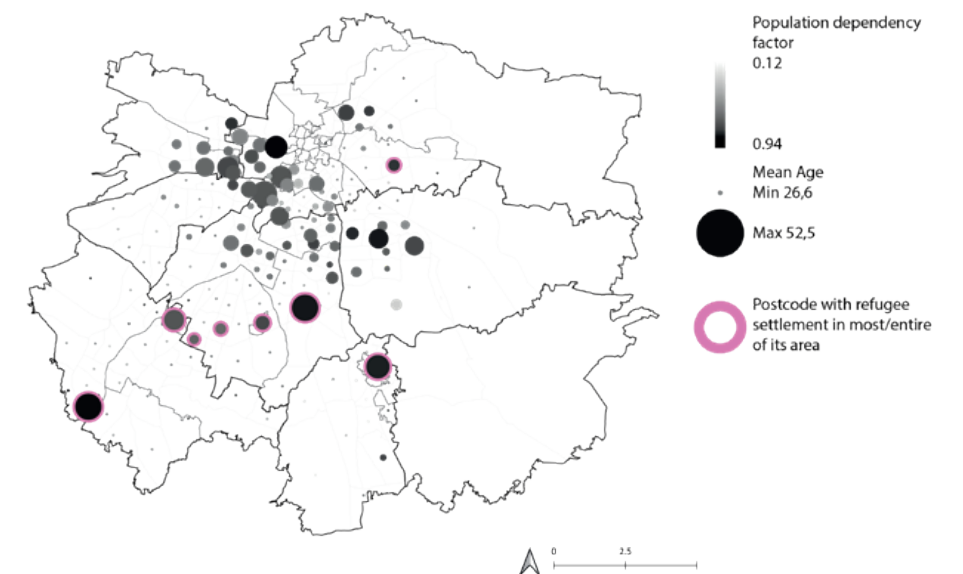


Fig. 39: Dependent population in Nicosia. Data retrieved from: <https://www.data.gov.cy/search/type/dataset>

Refugee Settlement Positioning

In most cases, the location of the refugee settlements is on the fringes of a highly dense and continuous built environment.

Refugee settlements, in their majority, are adjacent to regional axes and industrial areas. Moreover, refugee settlements were strategically located on the city's fringes, near existing or planned infrastructure, and where land cost was relatively low; based on 2019 data, they appear to be highly dense areas with potential access to green spaces and agriculture land.

Today, they stand still between the grasslands and the Nicosia urban environment on the city's fringes, in many cases adjacent to industrial areas and next to the main access points to Nicosia. Thus, their positioning is indeed strategically located. More prominent in size, refugee settlements have attracted urbanization around them over the years. Therefore, the refugee neighborhoods consist of unique organized neighborhood examples in Nicosia that, due to their initial planning and positioning, combine qualities of a rural way of living in an urbanized environment.

The network analysis was an input for the mobility flows in the Nicosia Street network. One main conclusion that can be drawn from the locations of the refugee settlements is that they are highly accessible neighborhoods. Highly accessible motorized axes enclose them. Motorized vehicles do not pass through the settlements; therefore, they are less visible and spatially known to nonresidents.

The walkability of the settlements is extremely low.

Thus, the settlements are entirely separated from adjacent neighborhoods regarding pedestrians and motorized vehicles. This contrasts with the observations from the settlements as they have pedestrian streets but do not form a network.

The main generalized conclusion from the network analysis of Nicosia is that the refugee settlements are highly accessible on a regional level. However, they comprise isolated communities within Nicosia's urban tissue on a neighborhood level.

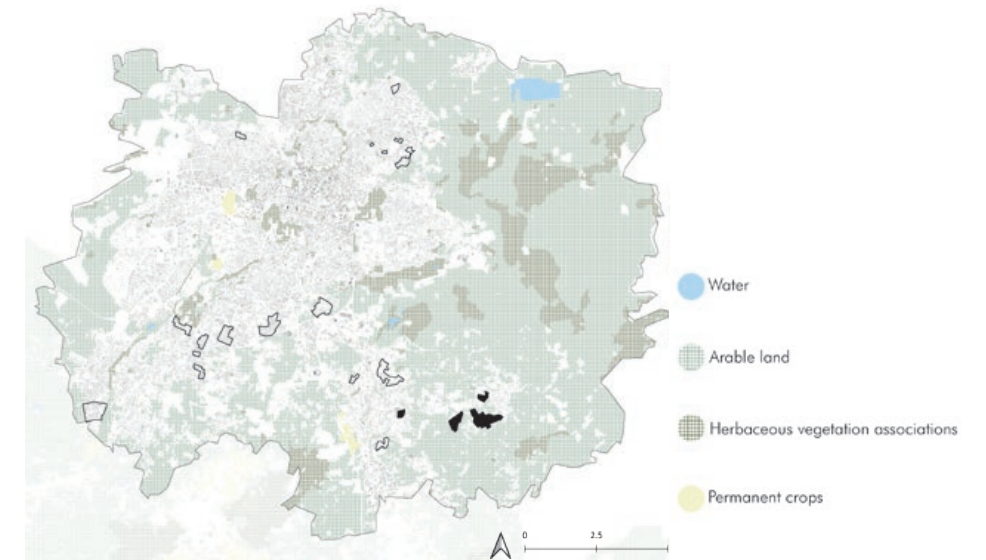


Fig. 40: Nicosia's green structure and refugee settlement positioning. Data retrieved from: <https://land.copernicus.eu/local/urban-atlas>, illustrated by the author

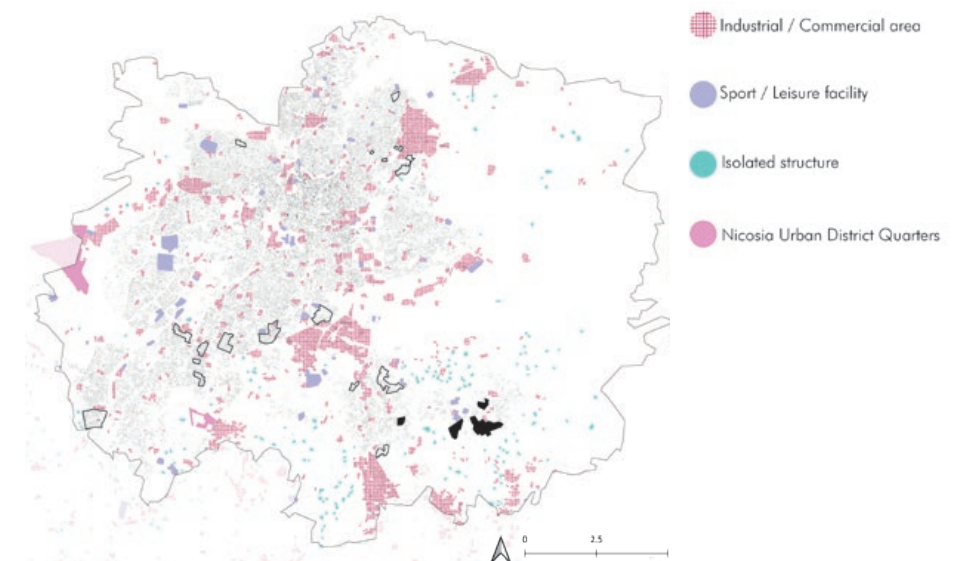


Fig. 41: Hyperlocal uses and refugee settlement positioning and Data retrieved from: <https://land.copernicus.eu/local/urban-atlas>, illustrated by the author

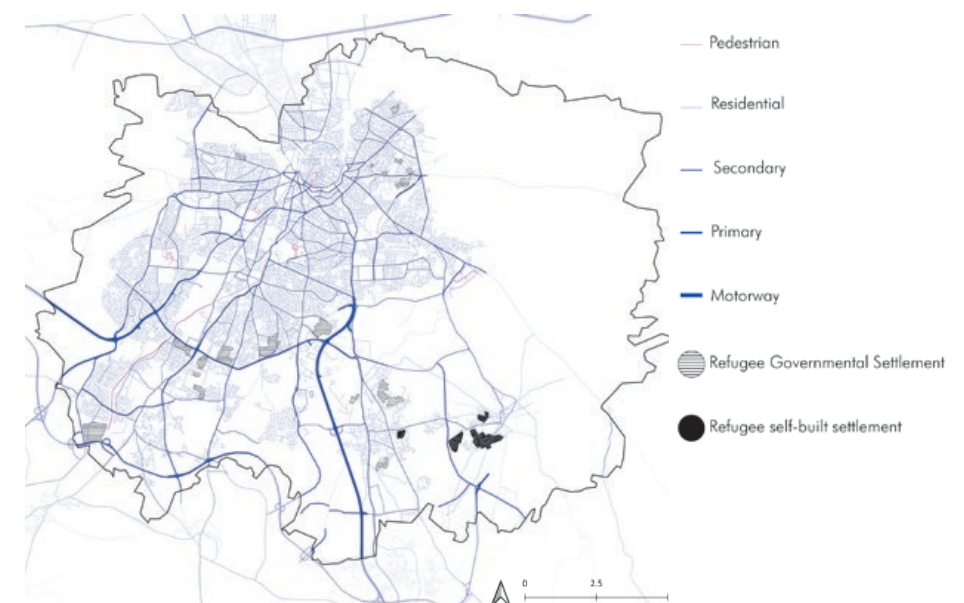


Fig. 42: Infrastructure and refugee settlement positioning. Data retrieved from QGIS, illustrated by the author

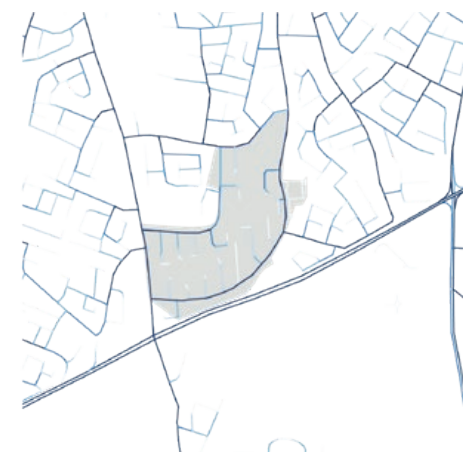
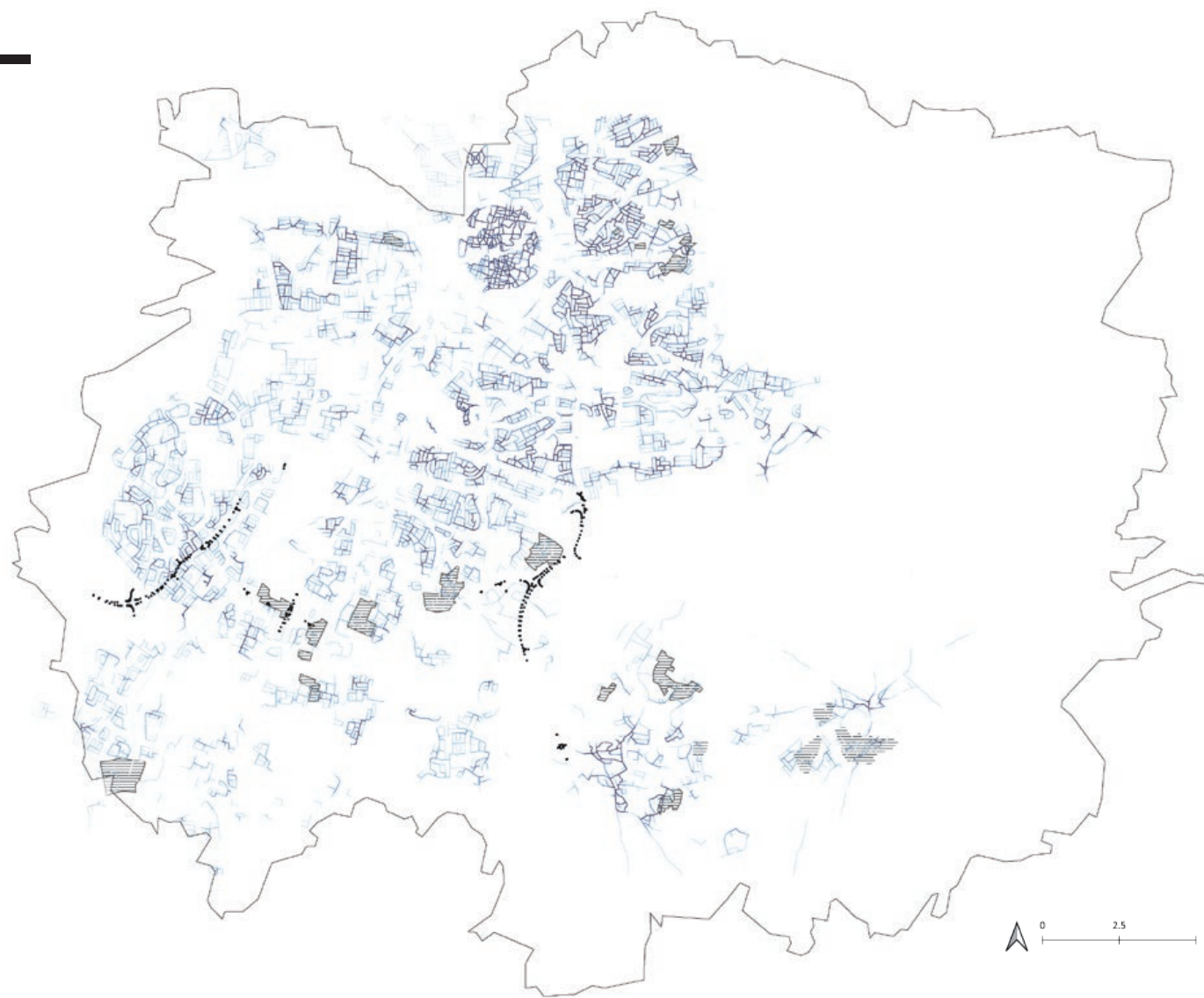


Fig. 43: Motorized vehicles network analysis with path 5 kilometers. On the top is Strovolos II refugee settlement, and to the bottom is the city of Nicosia. Data retrieved from QGIS, edited, and illustrated by the author

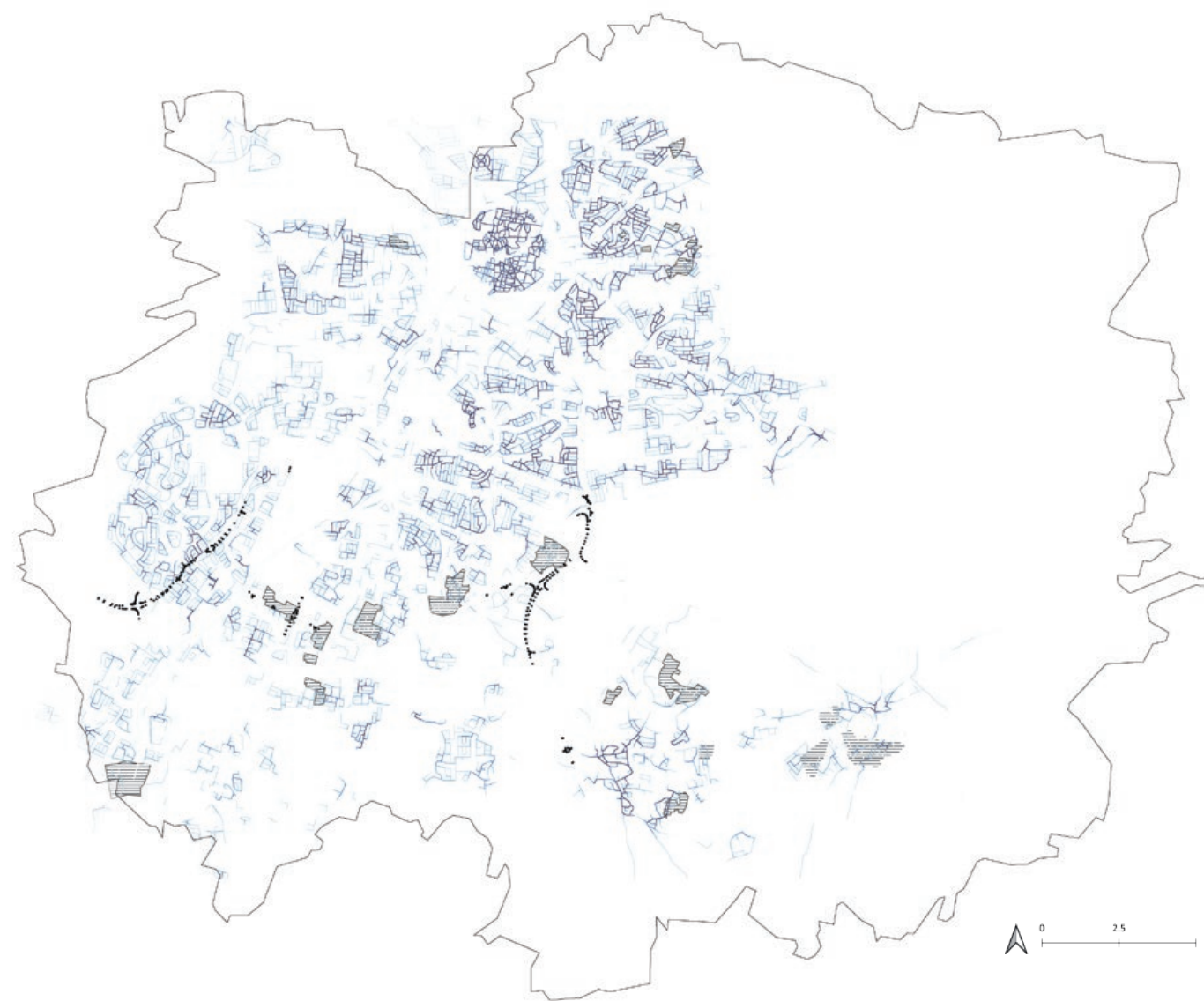


Fig. 44: Non-Motorized vehicles network analysis with path 300 meters. On the top is Strovolos II refugee settlement, and to the bottom is the city of Nicosia. Data retrieved from QGIS, edited, and illustrated by the author

4.4 Existing Spatial Patterns in Nicosia's Refugee Settlements

Spatial elements of the refugee settlements are, in many cases, distinguishable and repeatable common characteristics in the plethora of the governmental refugee settlements as the only example of organized neighborhoods in Cyprus. Therefore, the synthesis of street interviews, observations with statistical analysis, and the documentary archive on the refugee settlements illustrate spatial qualities, urgencies and remembrance acts that have been formed in the refugee neighborhoods over the years. Common spatial characteristics demonstrate the extent of place attachment of the residents of the refugee settlements with their living space and make them unique from an ordinary organized neighborhood.

Diving into the neighborhood scale through four distinct areas that represent different refugee settlement typologies (Fig. 45) the repeatable spatial patterns can be understood holistically in the context of Nicosia. A deeper analysis of the spatial patterns through their current state in comparison with other related evidence, such as statistical data and documentary observations are demonstrating a detailed understanding of the pattern's characteristics.

Liveability Existing Patterns

Border Permeability

Neighborhood boundaries of refugee resettlements lack of permeable points for residents. This consists of the settlements as isolated structures within the urban Nicosia.

Excessive parking in public space

Housing units were not designed to accommodate parking areas, thus due to the limited space of the owner's property, residents often create informal parking spaces by occupying part of the nearby public spaces.

Empty land

Refugee settlements, especially the ones with a higher number of housing units, often more than one hundred, contain public land, dedicated to future urbanization, based on the neighborhood's needs. No holistic vision nor planning was made since the neighborhood's creation; hence the land is unused up to the current date.

School

Larger refugee settlements, usually when above 250 housing units are adjacent to a school created along with the settlement, creating a resilient hyperlocal point. Schools were initially built for the first-generation child refugees since large refugee settlements were built in former rural land.

Church

A church is positioned at a central point in large refugee settlements, with approximately more than 500 housing units which was gradually formed to its current state along with the refugee settlement.

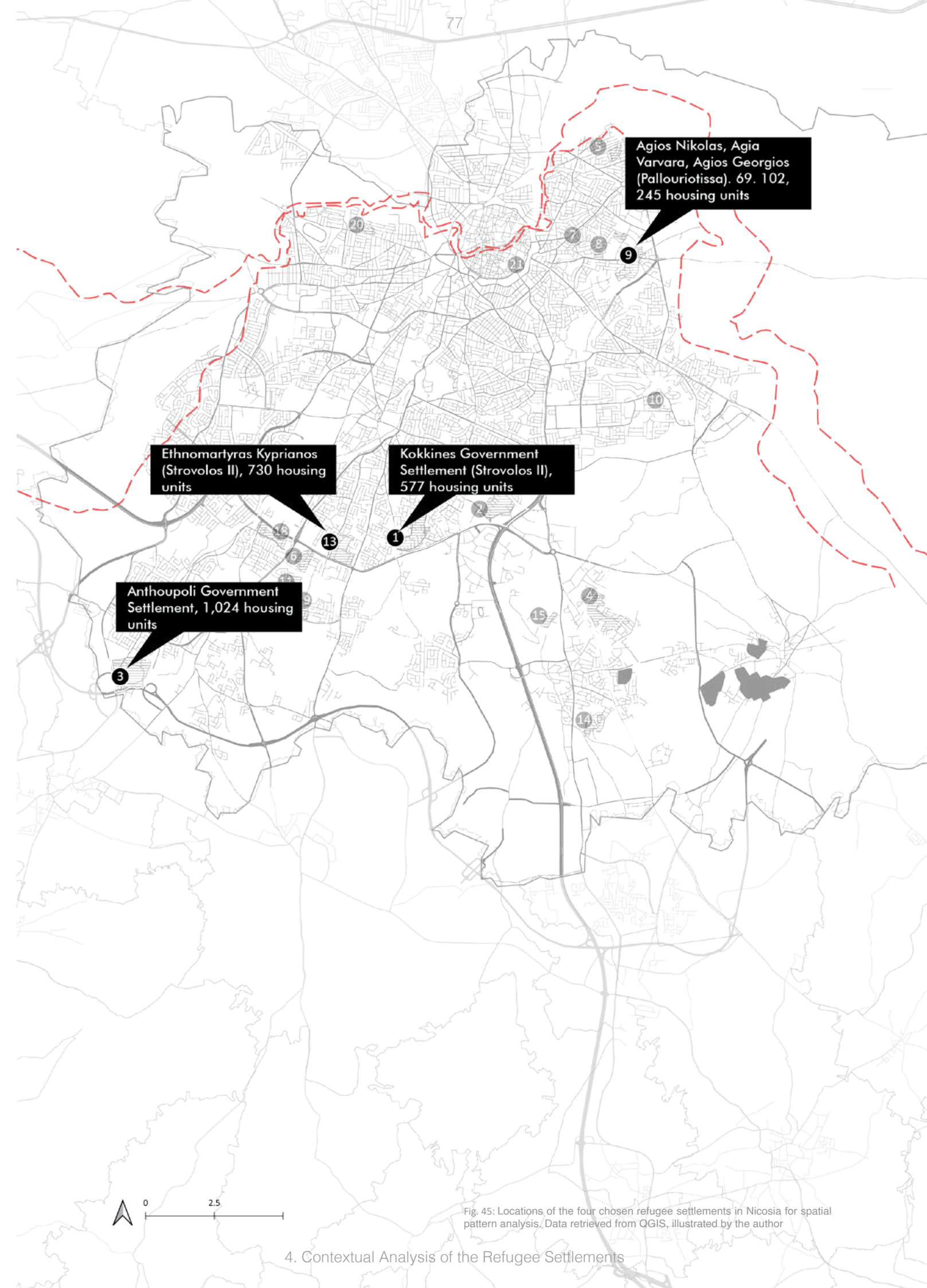


Fig. 45: Locations of the four chosen refugee settlements in Nicosia for spatial pattern analysis. Data retrieved from QGIS, illustrated by the author

Structural malfunctions/housing stock in decay

The rapidly constructed refugee settlements, struggle from signs of decay and structural malfunctions due to the inconsistent and partial repairs that are orchestrated mainly from the owners.

Inactive open spaces

Refugee settlement open space, share to a great extent lack of maintenance, consisting of them inactive and contributing to the overall attractiveness of the area.

Community center in decay

All refugee settlements include a central public space based on the overall size of the settlement the size and functions of the community center vary. Largest community centers may include mini markets, café, community council offices, bank, community clinic along with other local uses. Community centers do not apply in other neighborhoods since housing solutions in Cyprus are solved individually.

Unattractive pedestrian network

Narrow pedestrian streets in between housing units are another common characteristic of the refugee settlements. They are often neglected or in some exceptions consist of extensions of backyards.

Cultivation plots adjacent to front gardens

Cultivations plots were intentionally left through all the refugee settlements for the residents to use. Their size and frequency depend on the context specific characteristics of the settlement's location. The plots are cultivated from residents to a great extent.

Green space assorted with apartment building

Green spaces of apartment buildings in the refugee settlements are in most cases are cultivation spaces instead of a regular green space.

Distinct settlement entrance / Blurred settlement entrance

The neighborhood structure especially in the large settlements allows the entrance to the settlements from limited entry points. The peripheral settlement road encloses the neighborhood structure which consists mainly of dead-end roads. Smaller refugee settlements, especially those that consist of less than 60 housing units, do not form a clear boundary among the adjacent urban environment. Thus, they are blended with the city.

Remembrance Existing Patterns

Everyday human interaction in public spaces

The once crowded community centers and refugee settlement streets from families and children playing outside is just a memory of the first-generation refugees that reminds them their traumatic past and their path until settling in their new

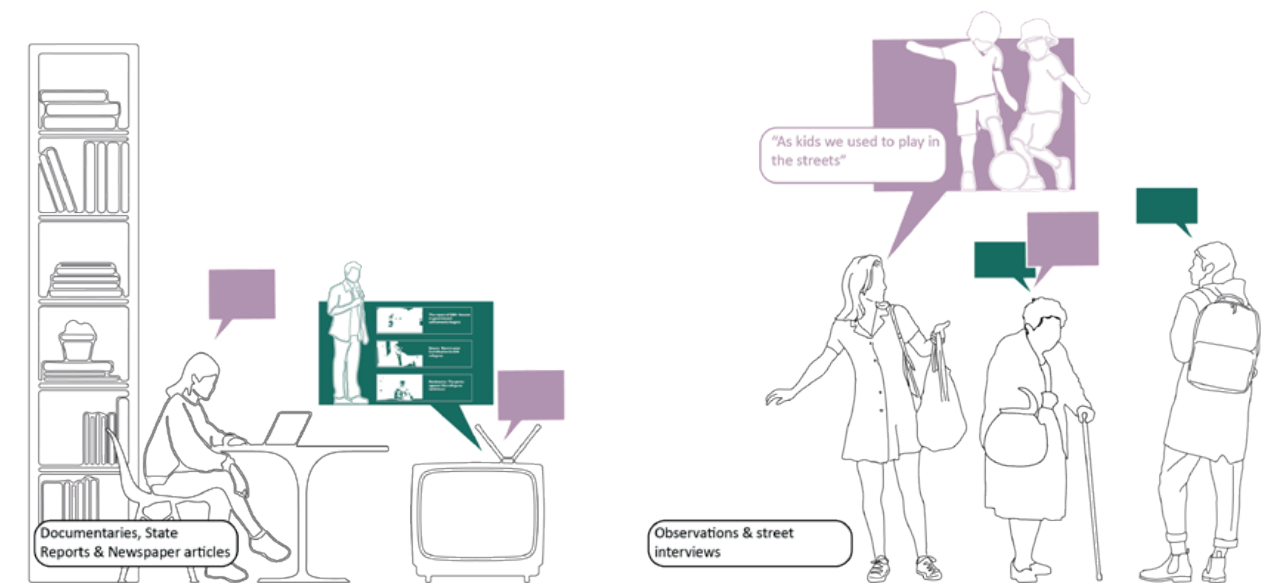


Fig. 46: The mixed quantitative and qualitative methods where the spatial patterns evolved from.

temporary homes. Today, the settlements stand silent, with hardly any signs of their crowded past, with the sense of community, sharing the same traumatic experiences, agonies and hopes through everyday social interactions to gradually fade away.

The blooming gardens

Row houses yards are filled with plants, in some cases plants that remind the refugees their home, or even have brought from their place of origin. A spatial pattern that contributes to the sense of small community, such as the ones that most refugees came from.

Street Names

Throughout Nicosia, but especially in the refugee settlements, several streets are named after the place of origin of the residents. Street names with the role of reminders of the origin of the initial residents of each street.

Traditional practices

Signs from the rural background of the refugees are still traceable through their living space, traditional ovens in the backyards, olive tree cultivation and handicraft practices.

Weekly market

The largest in size refugee settlements also have a weekly market to fulfil their resident's needs. An example of such case is the Anthoupolis settlement.

Collective meal gatherings

During public holidays and remembrance events, the whole community gathers and eats together after the event or remembrance action.

Visual connection among neighbors & passers-by Visual connection before entering the settlement

Due to the peripheral roads of settlements passersby have an impression of the settlement before entering.

Blur boundary public private

The refugee settlements were initially designed to a great extend as community housing. Thus, the limited resident plots were not adequate to fulfil the family's needs. This made the residents to informally occupy parts of the street in front of their houses to extend their living space.

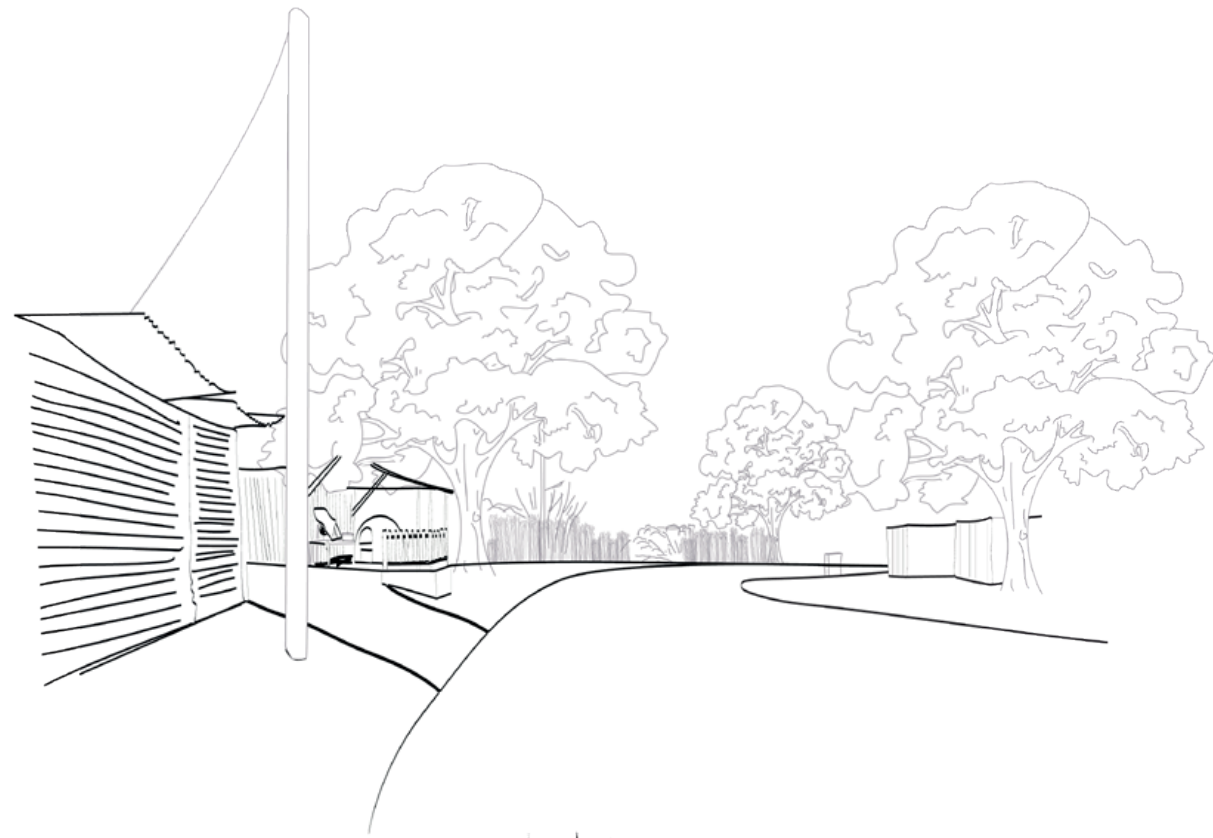
Monument

Through the refugee communities and local community councils' actions, remembrance of the still missing persons and the lost family members of the community are reminded through monuments dedicated to them in central points of the settlements.

Low rise family area

Up to present refugee settlements consist of monofunctional family areas. They form a homogenous family-oriented environments, without any mixed-use areas interfering.

Neighborhood Borders



Isolation

Unclear Public - Private Boundary
Blocked entrances
No connections
Blocked access to water
Lack of streetscape design
Contained
No pedestrian space



Fig. 47: Documentary frame, eye-level images, and network analysis, elements illustrating the past and current state of the refugee settlement borders.

Place Attachment



Familiarization

Human Interaction Place attachment social visibility

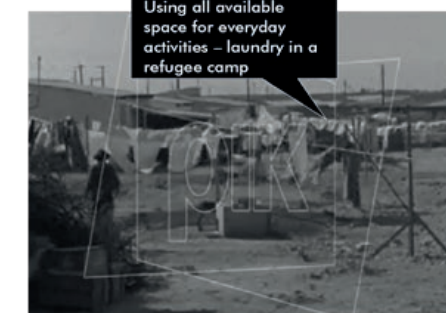
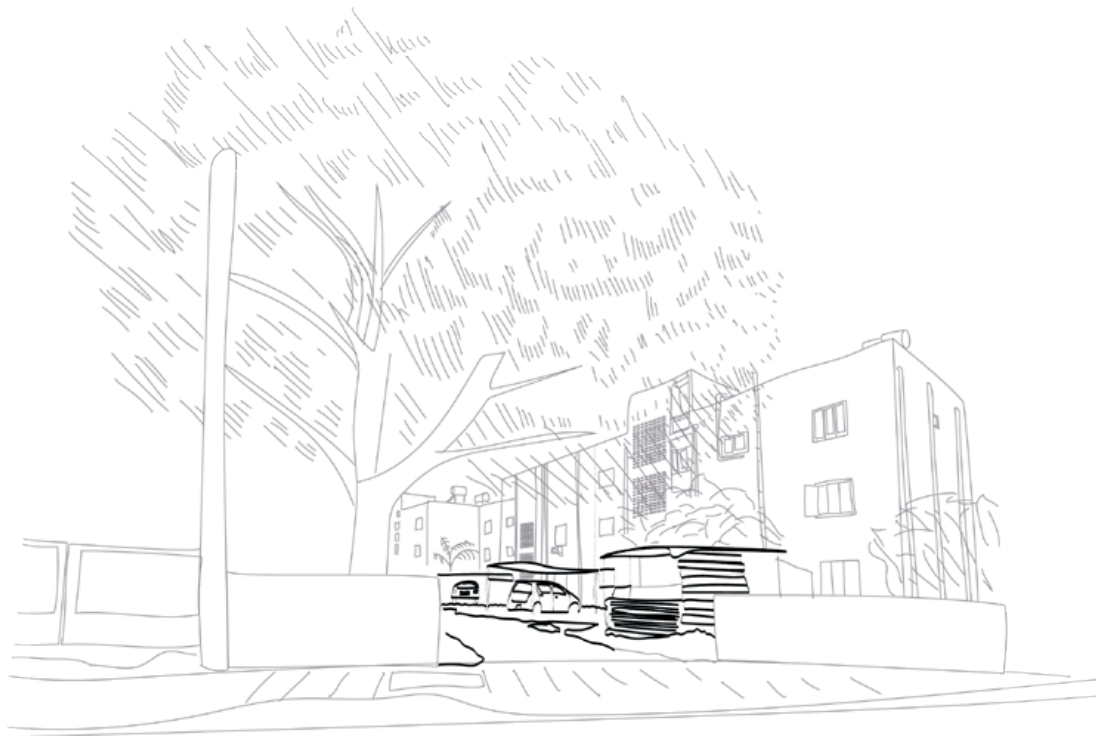


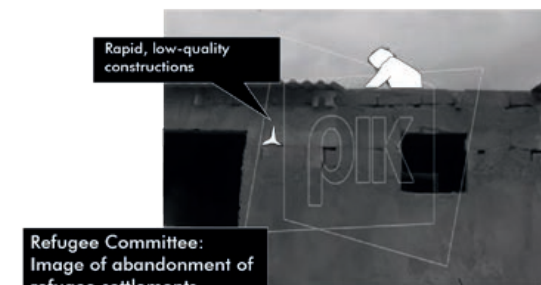
Fig. 48: Images illustrating the resident's adjacent public space used by the refugee residents.

Overall Built Environment Condition



Decay

Informal space occupation Unattractiveness No human presence Building abandonment



Refugee Committee:
Image of abandonment of
refugee settlements
"...At the same time, he
regretted that refugees are
treated as second-class citizens
in situations of quality of life,
while as taxpayers they are
treated equally with indigenous
citizens..."

"Refugees will become
Refugees again"



ANOVA - Density

Cases	Sum of Squares	df	Mean Square	F	p
Refugee Settlement	7.393e +6	1	7.393e +6	1.267	0.270
Residuals	1.692e +8	29	5.836e +6		

Note. Type III Sum of Squares

Descriptives

Descriptives - Density

Refugee Settlement	Mean	SD	N
Non Refugee	3378.699	2533.545	25
Refugee	4614.757	1742.731	6

Large size refugee resettlements have
a higher density than the rest of the
urban environment of Nicosia



Ethnomartyras Kyprianos (Strovolos II), 730 housing units



Agios Nikolas, Agia Varvara, Agios Georgios (Pallouriotissa). 69. 102, 245 housing units

Fig. 49: Data and images demonstrating the high density of the refugee settlements and the spatial consequence of the informal parking spaces in the refugee settlements.

Open Spaces



Old habits

Informal Cultivation Public-Private in between zone

Farmers in a refugee camp



ANOVA - Population dependency factor

Cases	Sum of Squares	df	Mean Square	F	p
Refugee Settlement	0.348	1	0.348	40.982	< .001
Residuals	0.246	29	0.008		

Note. Type III Sum of Squares

Descriptives

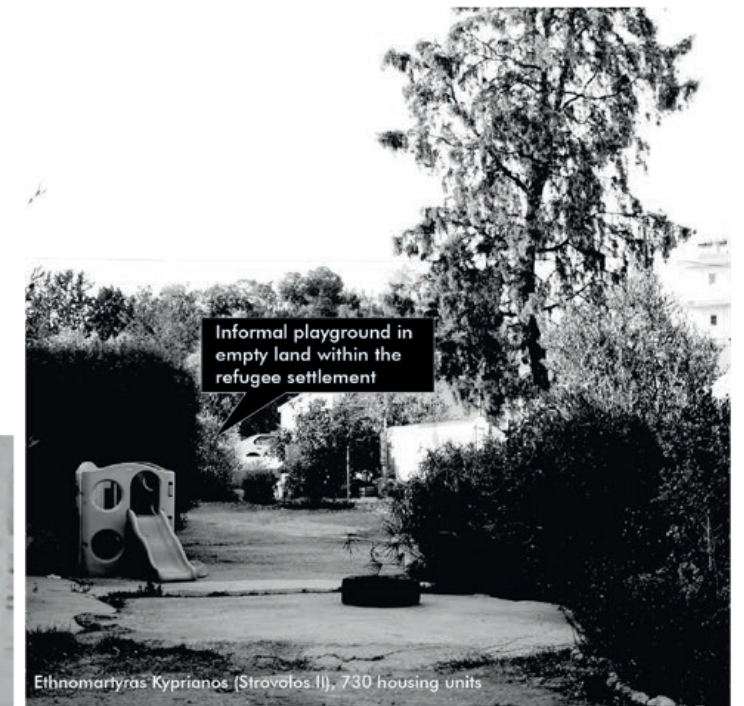
Descriptives - Population dependency factor

Refugee Settlement	Mean	SD	N
Non Refugee	0.357	0.080	25
Refugee	0.625	0.137	6

*dependent population = age group (0-14) + age group (65+)

Larger size refugee resettlements have almost twice the ratio of dependent population than the rest of the urban Nicosia

Informal playground in empty land within the refugee settlement



Ethnomartyras Kyprianos (Strovolos II), 730 housing units

Cultivating props next to the resident's house-olive trees



Anthoupoli Government Settlement, 1,024 housing units

Fig. 50: Open spaces without any particular use are used by residents for cultivation, and playground areas, serving the needs of mainly the dependent population of the refugee settlements.

Walkability & Daily Interaction



Permeability

Visual permeability Street network in decay Human absence Increasing fences height

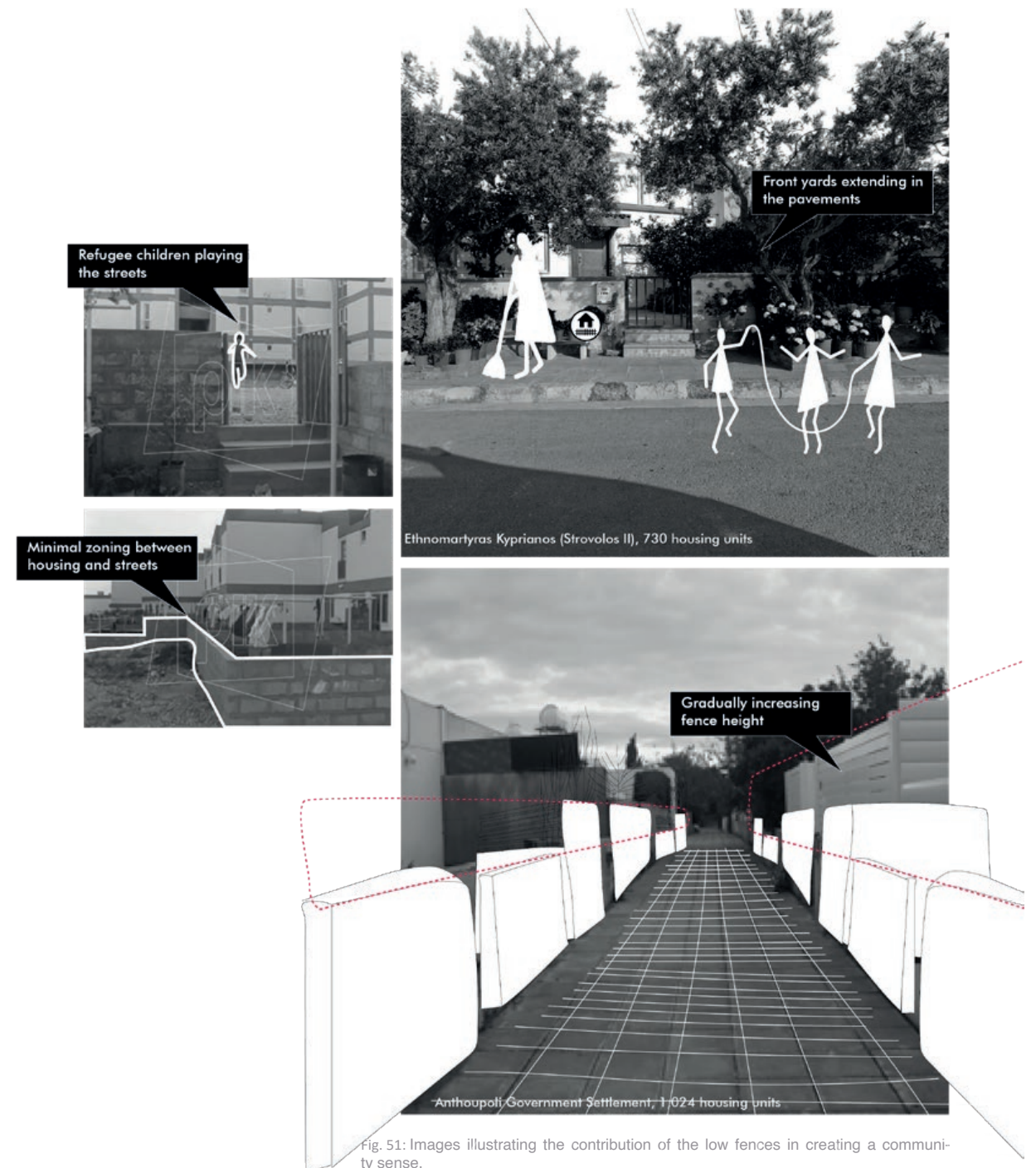


Fig. 51: Images illustrating the contribution of the low fences in creating a community sense.

Community Centers & Changing Residents Lifestyle



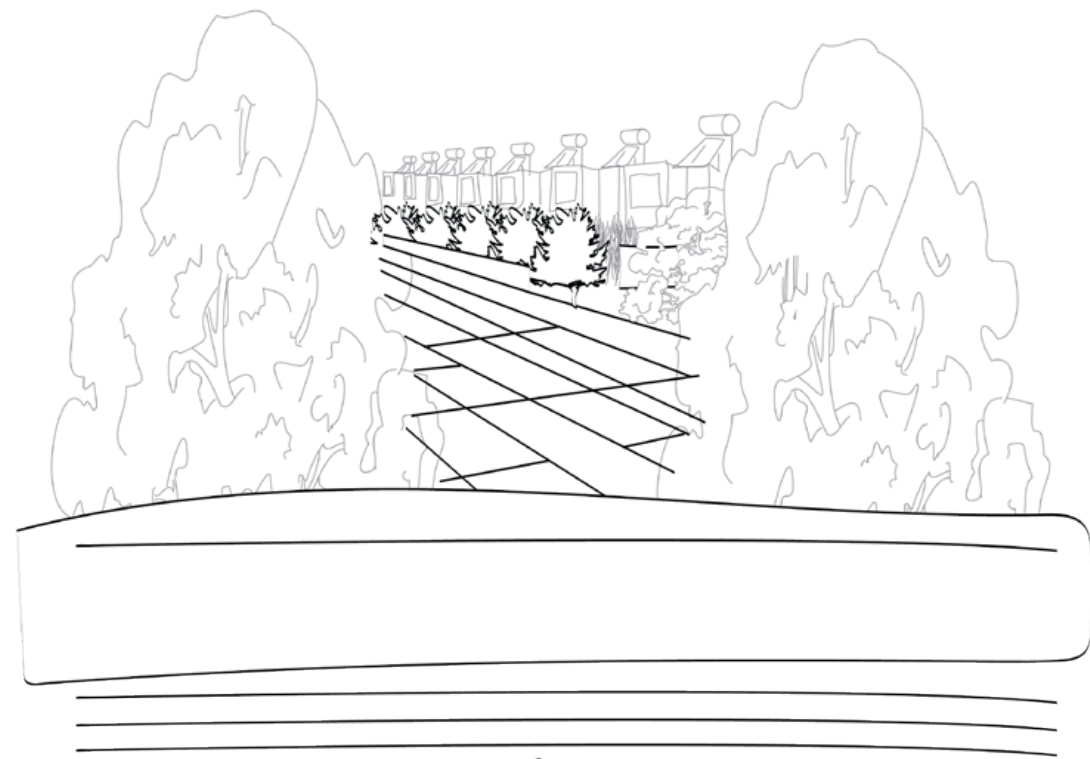
Empty Land

Informal garbage area Parking Noise containers Neighborhood Discontinuity



Fig. 52: Empty land within the area of the refugee settlements. Contrasting images among the daily overcrowded community centers in relation to their current state, decay, and local community absence.

Public Spaces & Changing Habits



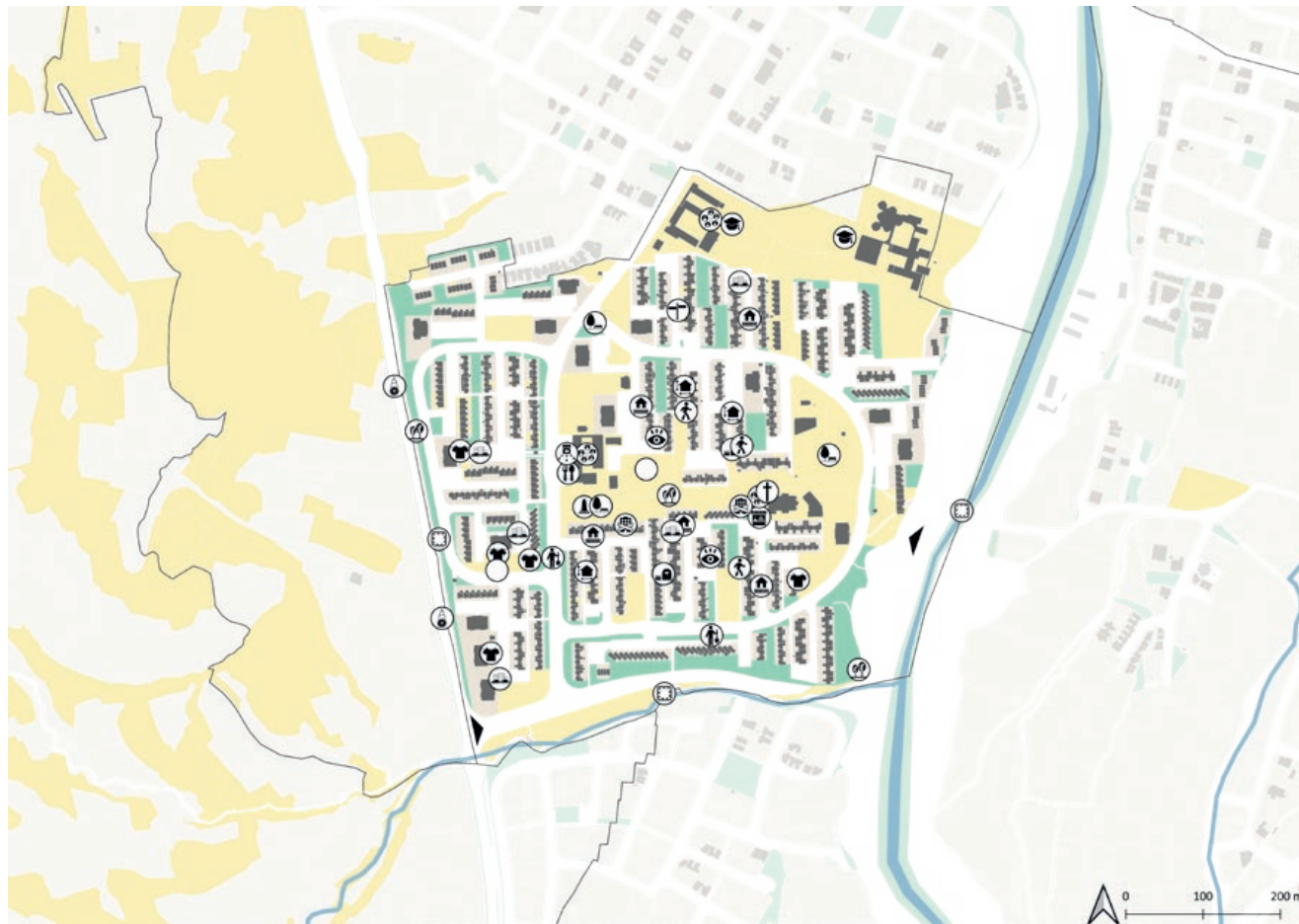
the Commons

Inactiveness 1st Gen. Refugee Childhood Memories Community space Decay



Spatial Pattern's Locations

Anthoupoli Government Settlement



- Border Permeability
- Excessive parking in public space
- Empty land
- School
- Church
- Structural malfunctions/housing stock in decay
- Inactive open spaces
- Community center in decay
- Unattractive pedestrian network
- Cultivation plots adjacent to front gardens
- Green space assorted with apartment building
- Distinct settlement entrance
- Blurred settlement entrance

Fig. 54: Spatial pattern overview based on observations, Anthoupoli Settlement

"Kokkines" Government Settlement (Strovolos), 577 Housing Units



- Everyday human interaction in public spaces
- The blooming gardens
- Street Names
- Traditional practices
- Weekly market
- Collective meal gatherings
- Visual connection among neighbors & passers-by
- connection before entering the settlement
- Blur boundary public private
- Monument
- Low rise family area

Fig. 55: Spatial pattern overview based on observations, Ethnomartyras Settlement

Ethnomartyras Kyprianos, (Strovolos II), 730 Housing Units
















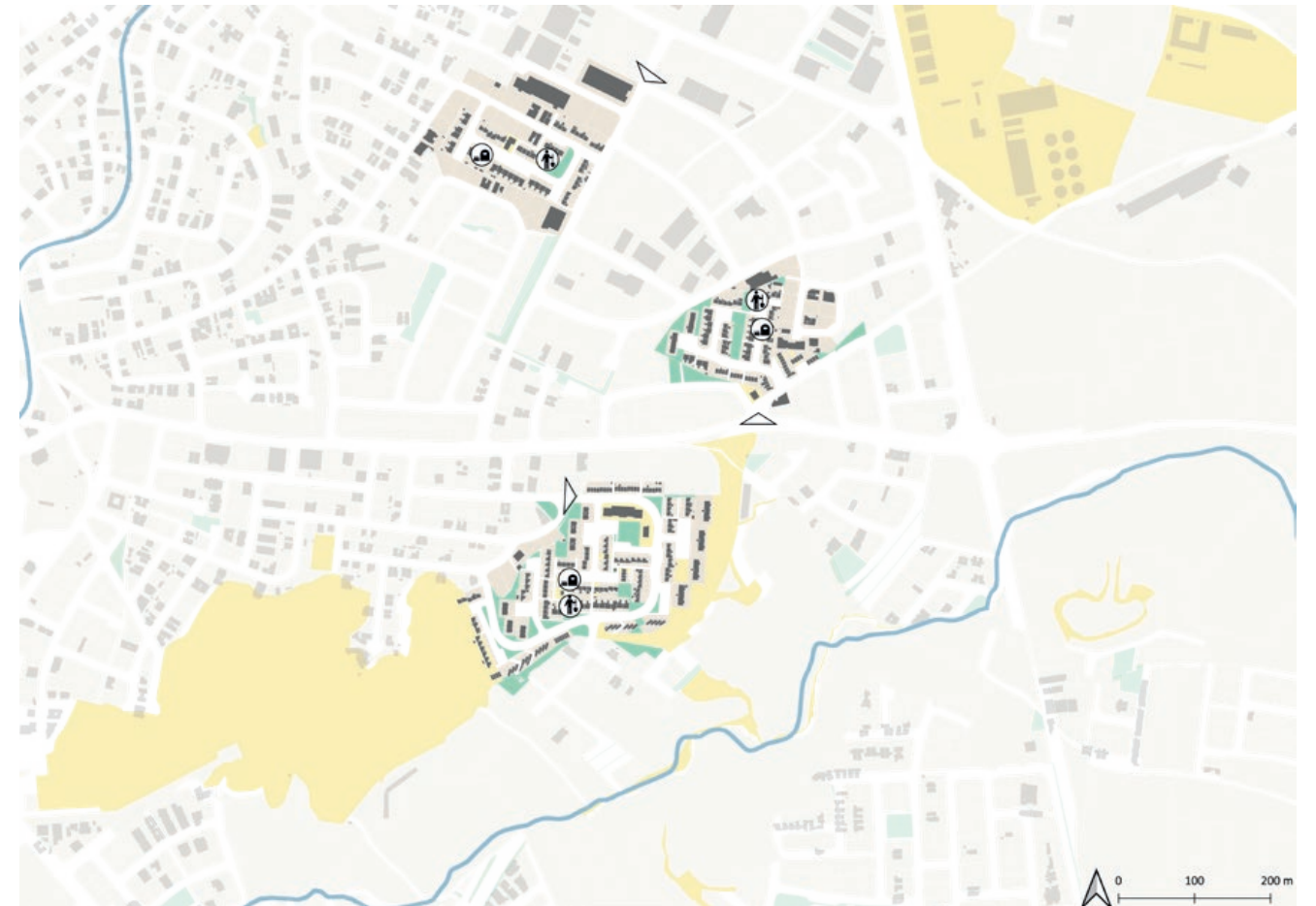
-  Border Permeability
-  Excessive parking in public space
-  Empty land
-  School
-  Church
-  Structural malfunctions/housing stock in decay
-  Inactive open spaces
-  Community center in decay
-  Unattractive pedestrian network
-  Cultivation plots adjacent to front gardens
-  Green space assorted with apartment building
-  Distinct settlement entrance
-  Blurred settlement entrance

Fig. 56: Spatial pattern overview based on observations, Strovolos II Settlement

Agios Nikolas, Agia Varvara, Agios Georgios (Pallouriotissa), 69, 102, 245 housing units














-  Everyday human interaction in public spaces
-  The blooming gardens
-  Street Names
-  Traditional practices
-  Weekly market
-  Collective meal gatherings
-  Visual connection among neighbors & passers-by
-  connection before entering the settlement
-  Blur boundary public private
-  Monument
-  Low rise family area

Fig. 57: Spatial pattern overview based on observations, Pallouriotissa Settlements

4.5 Reference Patterns

Community-led strategies referring to areas and communities that have gone under a traumatic event or conflict in the past were chosen, analyzed, and compared based on their event, distinct type of social memory spatial pattern that has been created related to remembrance, and the type of archive or intangible connection with the involved social group that has been made.

A fundamental difference between the patterns of remembrance is that they can be distinguished among patterns related to a traumatic event, where the event itself creates a community based on the group of people involved or related, and among patterns where they are related to a group of people that share common social characteristics or experiences and form a community.

Therefore, the reference pattern analysis illustrates patterns in various scales that, in some cases, consist of archives, creating a collective library of testimonies, locations, and material reminders available to the public. These patterns refer to a broader audience and have a role in ensuring the resilience of the initial social group or community but not necessarily the community building and resilience of the initial social group and the following generations related to the event or experiences. Therefore, archive patterns and global scale patterns are not essentially involved with the community's everyday life. In other cases, such as the Stolperstein, patterns create a decentralized spatial monument and a reminder of a traumatic event. In the Digital Pagkakia (benches), a city scale pattern, the benches as a pattern form an instrument where different generations interact, co-create, and constantly construct and

reconstruct their collective identity while sharing, acknowledging, and reminding their personal histories.

The reference patterns derive the role of the backbone of the patterns created, at a later stage of the report, for the Cypriot refugee settlements. The analysis and comparison of the reference patterns have indicated that patterns with a spatial implication have a more significant impact on building a community and involve a variety of generations and individuals rather than archive patterns, where they preserve specific memories mainly directed in policy formation.

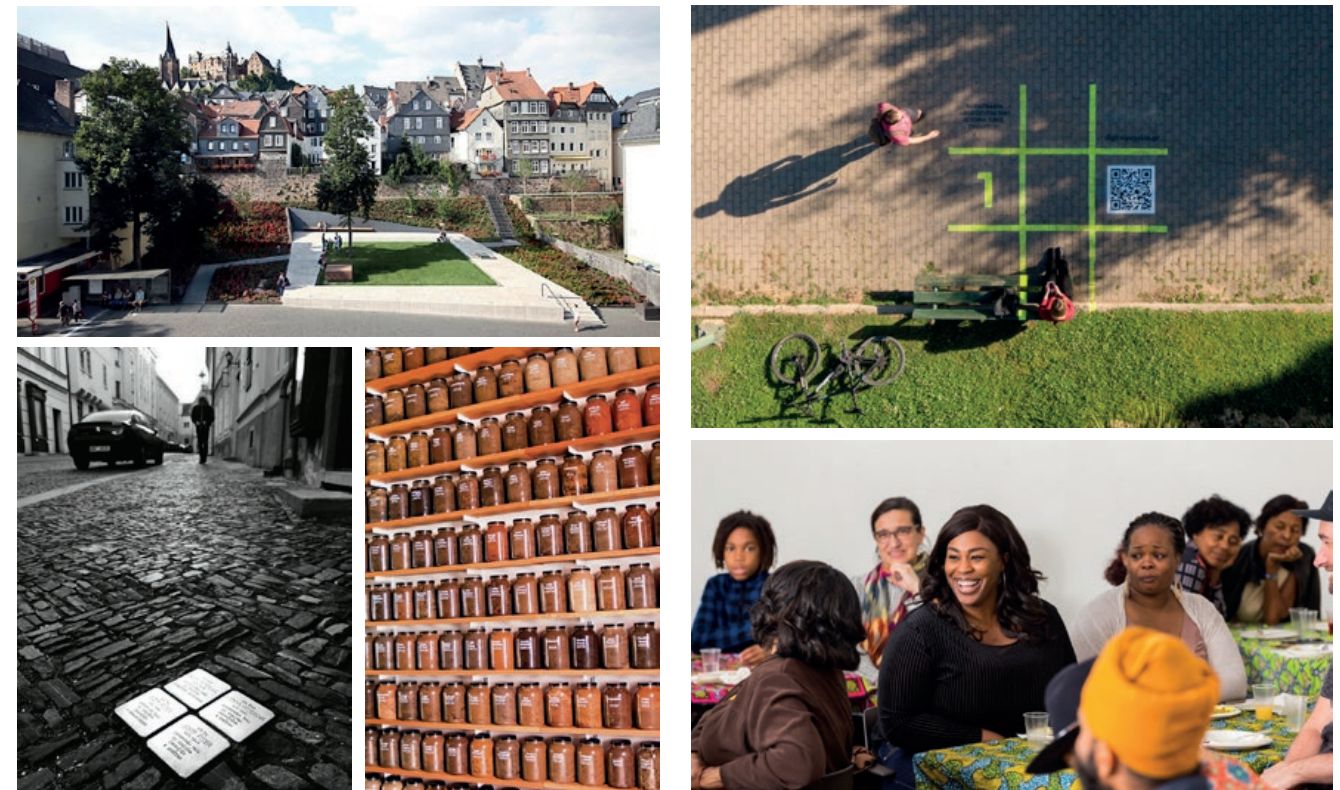


Fig. 58: Reference patterns on conflict events and communities, classified on specific events (left) and community practices (right).

Location	Event Archive	Community Archive	Issue	Characteristics of social memory	Spatial Patterns of Remembrance	Link to Remembrance	Specific Event	Community Practices
Athens, Greece	Greek Refugees		Greek Refugee community of Asia Minor, 1922, refugee settlements	Spatiality Local community memory	Refugee settlement with Owner-occupied housing units. Low-rise, self-built houses transformed an empty landscape into a densely built environment, and slowly evolved into an extension of the urban tissue.	Bus stop at the location where the original fountain “Vrysi” was named “Vrysi”. The fountain was the water source for the local refugee community since the refugee settlement did not include an irrigation system.	+	+
Ioannina, Greece		Jew community of Ioannina	Informal Exclusion from their premises in the city of Ioannina after their return	Temporality local/minor community memory	Publishing locally stories of the Greek Jews of Ioannina		+	
Montgomery, Alabama		Lynching Of Black People in the Jim Crow South		Local/minor community memory	Memorial to Peace and Justice , as a national monument to the victims of lynching Museum called From Enslavement to Mass Incarceration	The memorial’s design comprises 816 suspended columns, each representing a U.S. County in which EJI has documented lynching, with the names of that county’s known victims inscribed. Connect the history of slavery with the racial violence of the 20th century. One exhibit will feature hundreds, perhaps eventually thousands, of jars of soil from the sites of documented lynching , collected by community volunteers.	+	
Delft, Netherlands	The golden vowels in the Jozefstraat		revolves around special connections between people. They symbolize unique connections between people, inside and outside Delft	Temporality local	Each personalized gold clinker was a personal gift from two people. This golden clinker will have a permanent place in the Jozefstraat in Delft. Each vowel symbolizes a bond between two people.	'Delft is gold, you are gold' revolves around the golden stories of our time. Each vowel symbolizes a story that connects different people.	+	
	Jewish victims of the Holocaust			Decentralized Spatiality	Stolperstein , a sett-size, ten-centimeter (3.9 in) concrete cube bearing a brass plate inscribed with the name and life dates of victims of Nazi extermination or persecution	The Stolpersteine project, initiated by the German artist Gunter Demnig in 1992, aims to commemorate individuals at exactly the last place of residency—or, sometimes, work—which was freely chosen by the person before he or she fell victim to Nazi terror, euthanasia, eugenics, deportation to a concentration or extermination camp, or escaped persecution by emigration or suicide. As of December 2019, 75,000 Stolpersteine have been laid, making the Stolpersteine project the world’s largest decentralized memorial	+	
Pagkrati, Athens, Greece		Community sharing everyday stories on benches	Area Residents, passers-by Athens	community memory- collective identity	Everyday life stories used to be shared while sitting on benches whilst digital platform digitalpagakia.gr gathers them and creates a storytelling ‘museum’ in the heart of the city. At the selected and mapped and visually district benches people can rest and talk among each other like any normal bench while having the option to record or listen to a unique story from the bench’s digital platform.	Digital pagakia (benches) is a public art intervention that aims to collect audio recordings from citizens and passers-by in the city of Athens. This intervention aims to reveal the uniqueness of everyday life stories while keeping them alive and benches to obtain a narrative quality besides their useful one, making public space a vibrant place of expression & socialization.		+
		Humans of New York	Photography project of 10,000 New Yorkers on the street, and create an					+

Fig. 59: Reference patterns table on conflict events and communities

			exhaustive catalog of the city's inhabitants					
Marburg, Germany				Spatiality social event-community memory	Garden of Remembrance from scape Landschaftsarchitekten. It is located at the Marburg synagogue which was one of the burned and destroyed synagogues on the 9th of November 1938 by the Nazi regime in Germany and Austria. When strolling through the lower town of Marburg, you suddenly come across a gap in the otherwise dense development	However, the building should not only commemorate and admonish but also - at the express request of the Jewish community - also create a place of everyday life, an attractive open space with quality of stay. The design sees the memorial as a public garden, a »garden of remembrance«. A meaningful, emotional place should emerge, a place that loses its current casualness. The memorial does not want to hide, it penetrates the city and sets an unmistakable sign in the stony environment characterized by speed.	+	
Brooklyn, New York		African Diaspora through Brooklyn's food culture	Meals as Collective Memory , in Partnership with Weeksville Heritage Center	Collective memory	The partnership created opportunities to collect and document histories, elevate local businesses, share delicious food, and build connections between local government resources and Black-owned restaurants and entrepreneurs in Brooklyn. This initiative culminated in the Commission's first-ever Juneteenth Community Festival which honored the rich history of Black activism in Brooklyn and beyond.	A project focusing on collecting stories of Black community spaces and Black-owned businesses in the face of gentrification and neighborhood change. The effort, Meals as Collective Memory, documented the social and culinary history behind Black-owned restaurants in central Brooklyn. Through this project, the Commission celebrated Central Brooklyn's food culture, which itself is representative of the African diaspora.		+
	JDA		Earthquake of March 2011 in Japan	Spatiality Natural events memory	The JDA started with the project controlled by Harvard University and collects memories and records of the earthquake which occurred on March 11, 2011, in Japan	JDA especially collects electronic resources about personal experiences of the disasters and their aftermath such as websites, tweets, news articles	+	
	9/11 archives		The attack of September 11, 2001, in America	Spatiality social event memory	The 9/11 archives collect memories and records of the horrific attacks of September 11, 2001, and the terrorist events of February 26, 1993	Types of records are varied such as physical objects, oral records, film, video, etc. According to its collection policy (National September 11 Memorial and Museum, 2013), 9/11 archives try to collect websites, human remains, and unsolicited tributes , but the types cannot be found on the 9/11 archives website.	+	
	Open Archives		The movement for democracy in Korea	Temporality / Spatiality social event memory	Open Archives, which is operated by the Korea Democracy Foundation , was established to collect, arrange, digitalize, preserve, exhibit, and research the records of the movement for democracy in Korea.	Open Archives holds 575,712 records including documents, audio, video, books, diverse objects , and so on, and the collections are grouped by events, times, and such material types.	+	+
		Holocaust archives	people who directly or indirectly experienced the Holocaust	Temporality / Spatiality Local community memory	United States Holocaust Memorial Museum is a repository which documents Holocaust memories of people such as victims, survivors, rescuers, liberators, and others and aims to create a "permanent living memorial to the victims of the Holocaust" (United States Holocaust Memorial Museum, 2018).	The museum collects records that relate to their stories, experiences, and histories and the collections are composed of 275,724 records such as documents, artifacts, photos, films, books, and testimonies. The records are provided as original records except for oral history	+	+
		Black archives	people of African and Caribbean descent in Britain	Temporality local/minor community memory	The Black Cultural Archives is the only national institution dedicated to collecting, preserving, and celebrating the histories of the diverse people of African and Caribbean descent in Britain.	The records are 3,500 items and grouped by 41 collections (personal papers, ephemera, and photos). However, users can not access the original records, and even digitalized records on the website are closed		+
		ArQuives	LGBTQ2 people	Temporality Minor community memory	The ArQuives was established to recover and preserve lesbian, gay, bisexual, transgender, queer, and questioning (LGBTQ2) peoples' history.	Thus, it tries to acquire, preserve, organize, and give the public access to information and materials in any form, by and about the community.		+

4.6 Stakeholder Analysis

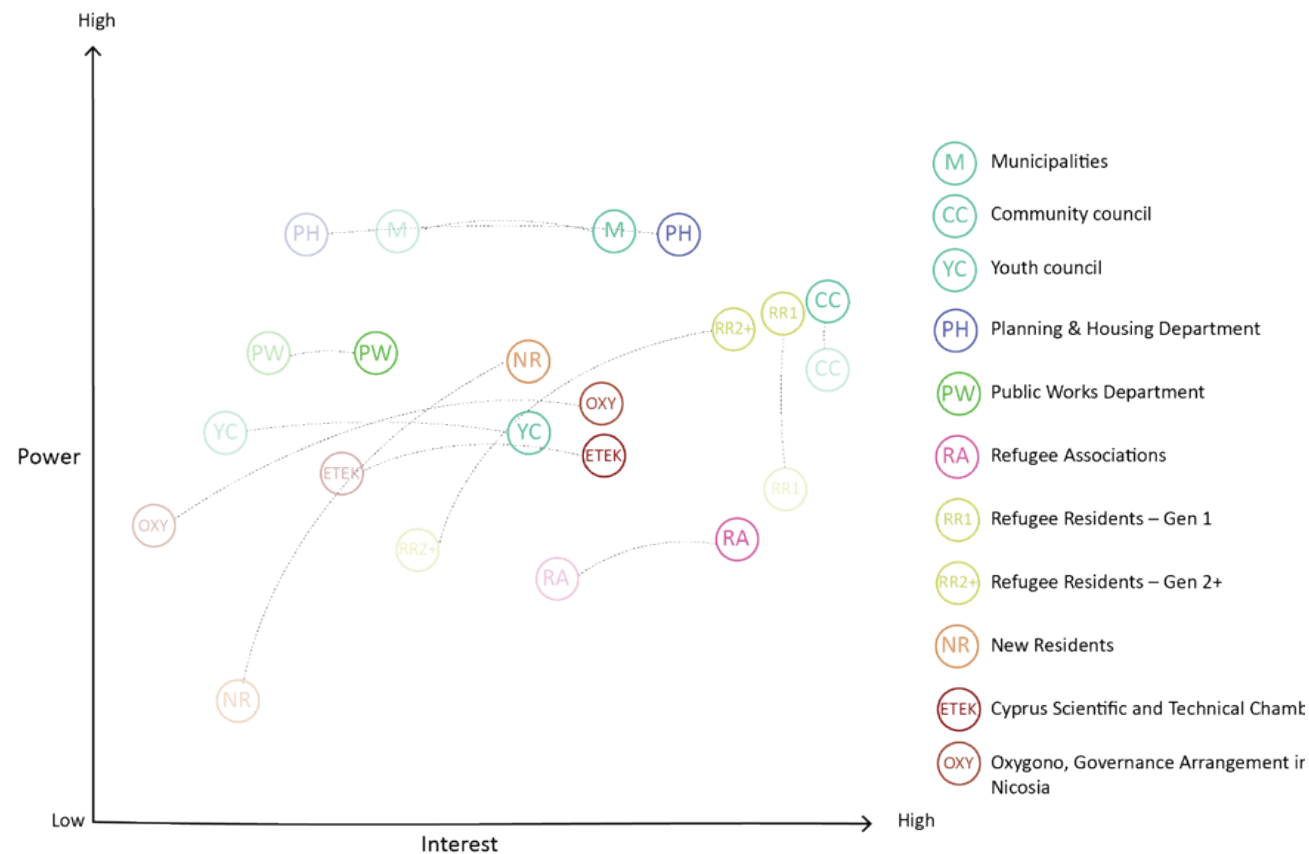


Fig. 60: Refugee settlement stakeholder analysis diagram

The Cypriot refugee settlements are a complex and long-term topic of discussion in Cyprus. **The Planning and Housing Department** of the government in Cyprus is the principal department responsible for the planning, construction, and maintenance of the refugee housing plan since the resettlement of the Greek Cypriot refugees in refugee camps and later the refugee settlements. Thus, the planning & housing department and the Public Works Department are stakeholders with significant power in shaping and transforming the refugee settlements. Their role through the years was more present during the creation and implementation of the housing plan and replacement of structurally problematic housing units until 1993, while the actions planned and implemented depict their gradual absence through the years. While the residents' dynamic of the refugee settlements and their needs changed through the decades, the planning of the refugee settlements, and the need to transition into neighborhoods, were limited. It included the demolition and reconstruction of housing units unsuitable for repair, the lift addition on the apartment blocks, and the maintenance of streets and pavements.

In the meantime, the social mixture of these organized neighborhoods evolved into a more complex and diverse social group, including the aging first generation Greek-Cypriot refugees, their descendants, the current and future generations of Greek-Cypriot refugees, and immigrants. All actions consist of responses to complaints of community councils, the first, second, and third generation refugees living in refugee settlements. Community councils, usually formed in the largest in size refugee settlements, hold the role of advocating and fulfilling the community's needs.

Time has drawn the discontinuities between stakeholders and their actions in the refugee settlements. It was observed that the planning and housing department's efforts aimed at the livability of the refugee settlements and municipalities are limited to the basic urban needs of the community. Actions related to the social sustainability of the residents are limited to informal local actions of residents. Behaviors that have been considered during the initial planning and design of the organized neighborhoods, such as community centers, multipurpose green spaces, and

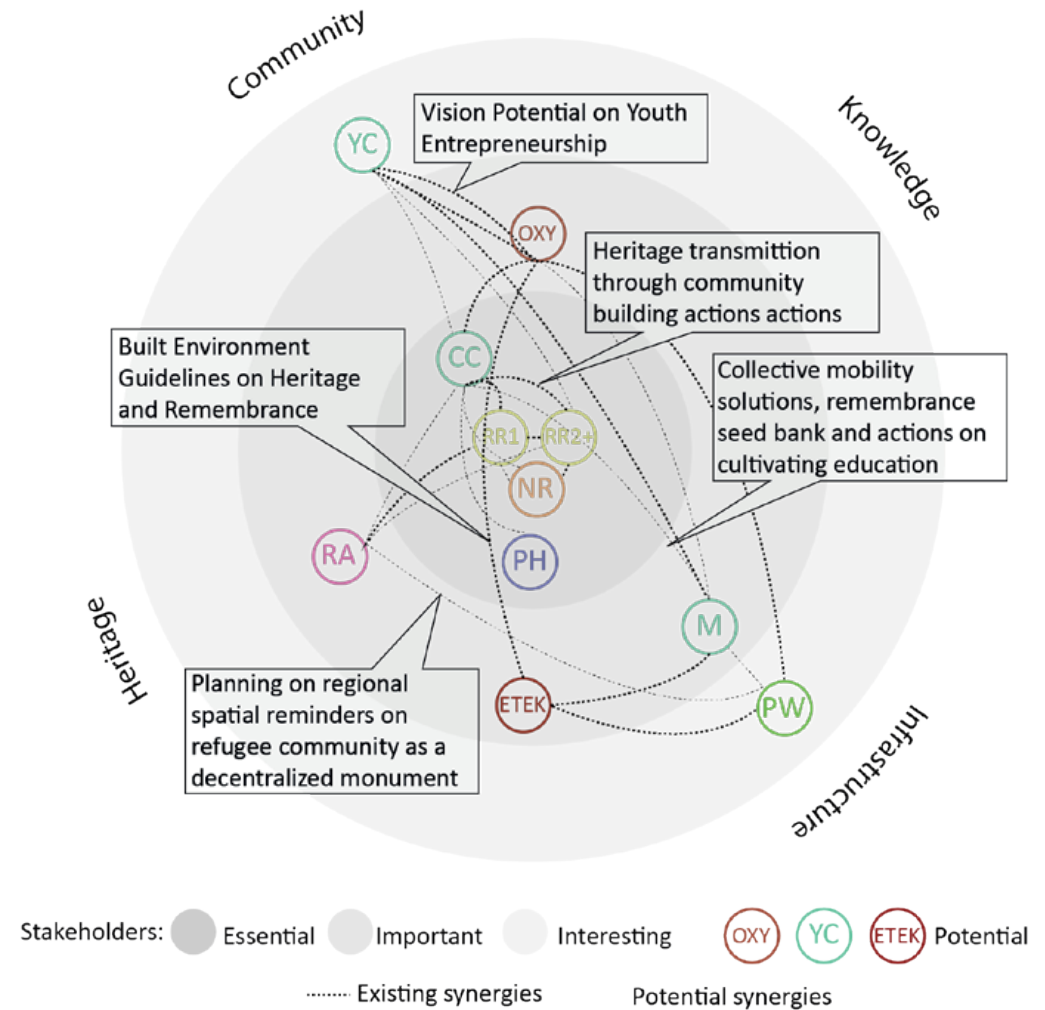


Fig. 61: Synergies among actors and stakeholders

open public spaces, without planning their evolution through time. Thus, these examples and, concurrently, social sustainability have been neglected over the years, creating uncertainty for their future.

The actions related to the remembrance of the refugee community consist of examples of cooperation among stakeholders. Nevertheless, they are limited to planning local parks, monuments, and street names in the built environment, letting in the background actions related to the social reconstruction of the refugee community and community building among the new social consistency of the refugee neighborhoods.

An ongoing discussion on creating a 2040 vision for Nicosia is an evolving opportunity for the refugee neighborhoods. Oxygen holds the debate, a local NGO that embraces interaction among universities, municipalities, and researchers among the Youth Board of Cyprus and the Scientific and Technical Chamber of Cyprus. The current urgency for Oxygen is the need to create affordable housing solutions for students and starters

through the exploitation of vacant buildings in Nicosia, mainly in the old city within the walls. Thus, through this initiative, Oxygen started a discussion in imagining fair and desirable futures for Nicosia's built environment, collectively from all the actors involved. Consequently, Oxygen has the potential to start a parallel discussion for creating an efficient path of cooperation among stakeholders of the refugee neighborhoods, creating an urban vision, along with guidelines and sensitive policies for the refugee settlements as a part of Cyprus's contemporary history of urban heritage and their community building.

Subsidies, referring to starters, the next generations of refugees do exist. These subsidies include a benefit plan and financial aid for the housing of the displaced. The program has the potential to be used in combination with subsidies.



5 . P a t t e r n L a n g u a g e D e v e l o p m e n t a n d C o m m u n i t y B u i l d i n g S t r a t e g i c A p p r o a c h

This chapter is dedicated to the pattern language formation for the Cypriot refugee settlements. It introduces the pattern language methodology, the patterns created devoted to the remembrance and liveability of the refugee community in the refugee settlements and the pattern field which indicates the positioning of each pattern and its relationship with the rest patterns.

Fig. 62: Strovolos II Settlement, Nicosia, January 2022

5.1 Pattern Development Framework

The focus of the pattern's language development is on liveability and remembrance patterns. These patterns can be implied individually or combined to ensure a livable environment while preserving important memory aspects of a community. They aim to build a socially and spatially resilient future for the Cypriot refugee community. Liveability patterns focus on the elements of environmental sustainability related to remembrance. Therefore, the emphasis is on liveability patterns necessary for a transition to essential liveability changes in the refugee neighborhoods while considering the preservation of certain valuable spatial qualities of the collective memory of the refugee community. Furthermore, the patterns created on liveability intend to preserve and develop spatial reminders and qualities, community practices, and activities that collectively form the identity of the refugee community. The remembrance patterns are designed to derive the role of spatial reminders of the first-generation refugee life histories, the construction and reconstruction of the current and future refugee generations, and new residents living in the former refugee settlements.

“What is the most powerful force in the world? A big pattern-change idea.” – Bill Drayton, founder of Ashoka

Patterns consist of a title, a hypothesis, a practical implementation, and an illustration. These elements construct in a simple way a summary of the action proposed and the spatial change that can result. Their relationships are described very briefly, only specifying the links to other patterns that may be relevant to solving a particular design problem.



Fig. 63: Pattern language categories diagram

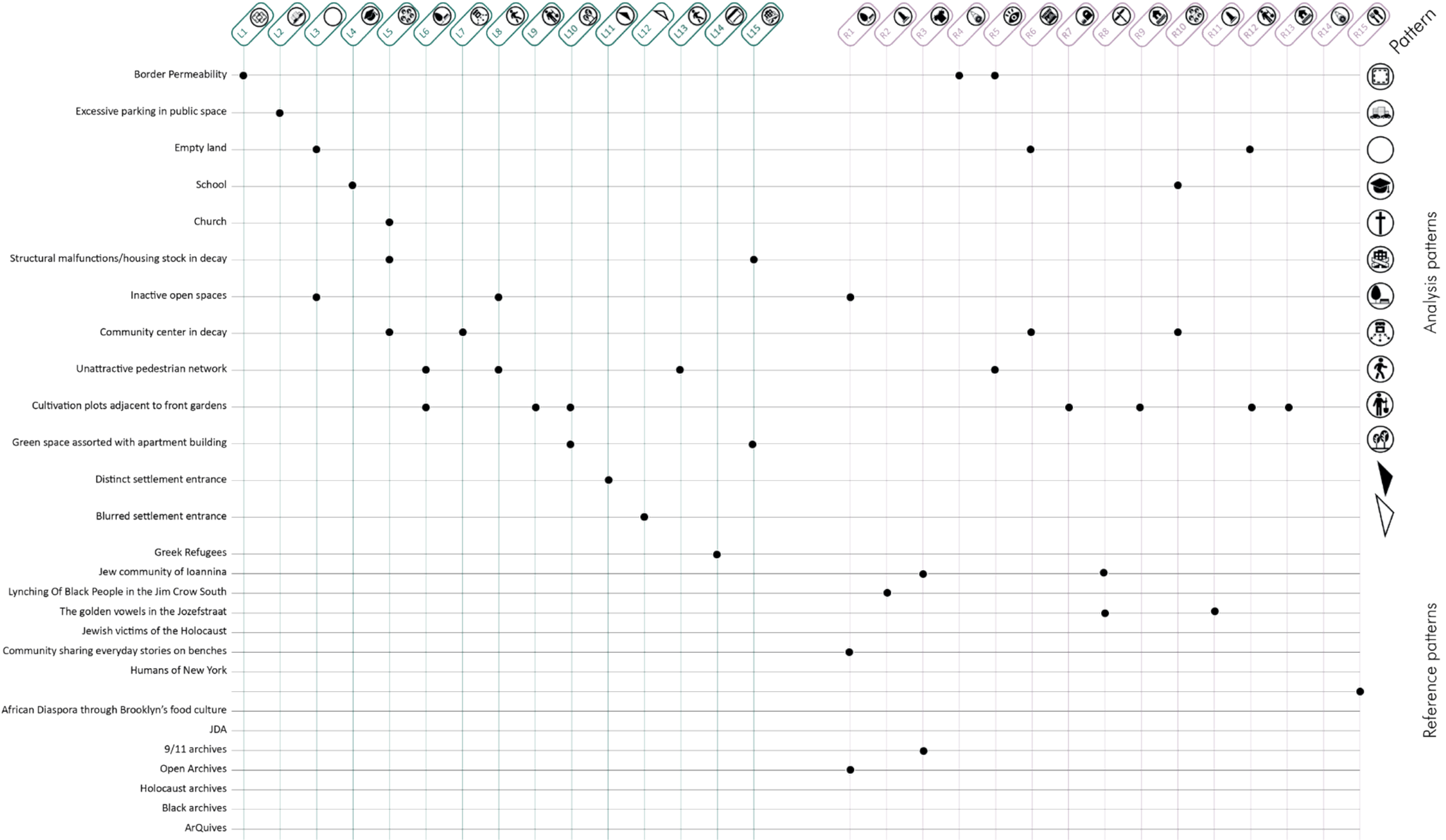
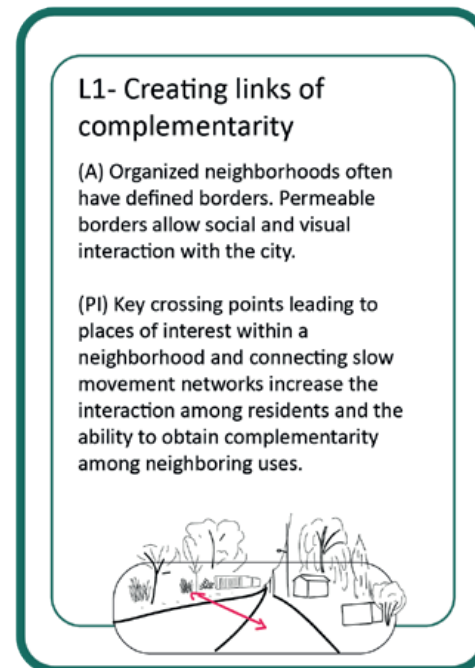


Fig. 64: Analysis and reference pattern relation with patterns created for the Cypriot refugee settlements

5.2 Liveability Patterns

The set of patterns created illustrate a condensed summary of spatial problems and possible solutions by analyzing the evolution through time and the current state of the refugee settlements. They represent actions and practical implications on the built environments that impact the improvement of the liveability conditions of the current and future communities of the refugee settlements. Liveability patterns aim to take advantage and empower existing practices and resources or adapt the built environment to current needs through mild changes or actions that add to a more significant impact on the community.



L1 M CC PH

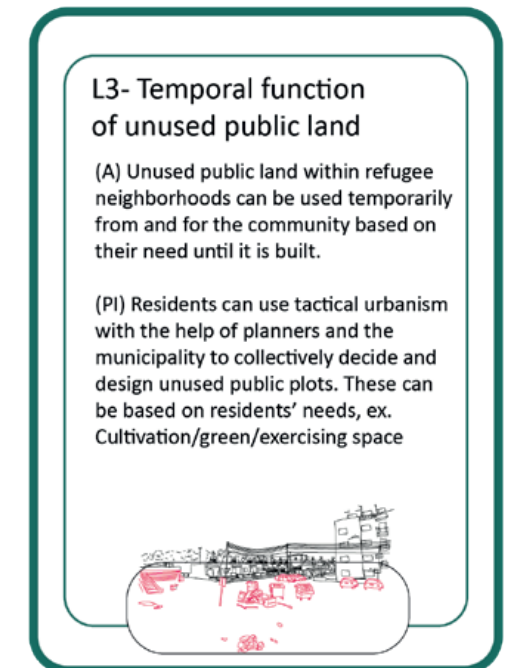
Fundamental for: L8, L11

Synergize with: L3, L5, L7, L11

Complementary for: L6, R2



L2 M CC RR1 RR2+ NR PH



L3 RR1 RR2+ NR PH

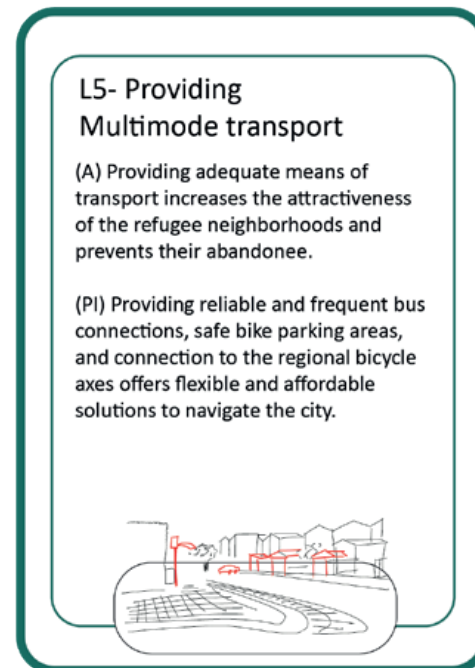
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Synergize with: L1, L5, L7, L11



L4 RR1 RR2+ NR CC PH RA

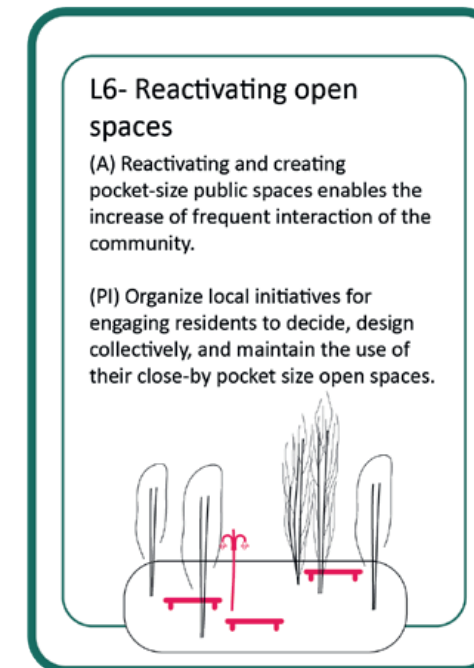
Synergize with: L9, R12



L5 M CC PH RA

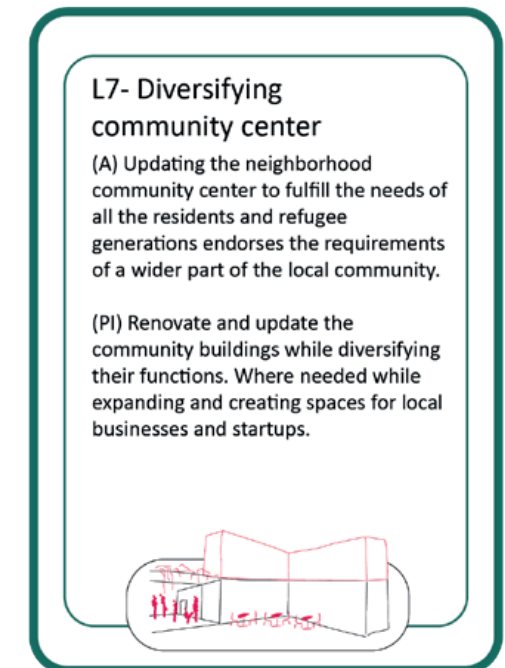
Synergize with: L1, L3, L11

Complementary to: L14



L6 M CC RR1 RR2+ NR

Complementary for: L1, L10, R1



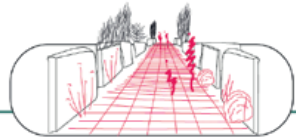
L7 CC YC OXY ETEK PH

Synergize with: L1, L3, L5, L11, R6

L8- Inviting pedestrian network

(A) An attractive pedestrian network endorses mobility within the neighborhood without a vehicle and familiarizes and attaches pedestrians to their surrounding environment.

(PI) Create links between pedestrian roads, provide shading in main neighborhood pedestrians directly exposed to the sun, and create semi-paved paths with vegetation to create a microclimate.



L8

Synergize with: L13

L9- Empowering urban cultivation culture

(A) Creating the environment for the informal cultivation culture to be preserved and evolved will ensure the resilience of the fundamental characteristic of the refugee community, the rural one, while differentiating the refugee neighborhoods from ordinary neighborhoods in Nicosia.

(PI) Organize local workshops, educational seminars, and knowledge exchange on urban cultivation tips and methods. Additionally, support the initiatives with subsidies.



L9

Synergize with: L4, R12

L10- Co-creating pocket public spaces

(H) (Co)Creating public spaces endorses the sense of belonging among residents and community bonding.

(PI) Collectively deciding and creating the functions of the pocket public areas in the neighborhood, aiming for the social interaction among residents. The uses could be sports activities, picnic spaces, recycling points, green spaces, etc.



L10

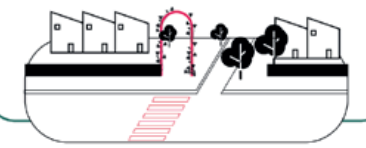
Complementary for: L1, L6, R1

Synergize with: R15

L11- Inviting settlement entrance

(A) Easy access to the refugee neighborhoods will attract more passersby, incorporating the areas with the urban tissue.

(PI) Redesign Street entrances, traffic lighting, and pedestrian crossings where needed. Furthermore, improving the overall adjacent greenery at the entrance points will highlight the neighborhood connection.



L11

Synergize with: L1, L3, L5

L12- Endorsing flexibility to urban renewal

(A) Refugee neighborhoods of just a few streets can be more flexible to spatial interventions.

(PI) Allowing flexibility to the housing typologies and potential regeneration of the area while preserving pocket public spaces if they exist.

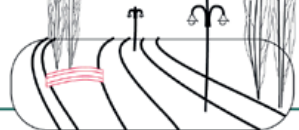


L12

L13- Expanding to regional pedestrian network

(A) Access to the regional pedestrian network will increase the pedestrian flows of the settlement with the city while connecting it with the water structure, the only natural element connecting the divided Nicosia.

(PI) Create access points from the refugee settlement to the pedestrian network, clearly mapped and signed, starting from the community centers, the central settlement public space, or linked with the settlement's pedestrian network. Sitting and bike parking areas should accompany access points.



L13

Synergize with: L8

L14- Accommodating bus stations

(A) Improving the environment of the bus stations creates a safe and pleasant feeling while waiting.

(PI) Provide information on the bus schedule, adequate shading and sitting area, bike parking, and street lighting.



L14

Complementary to: L5

L15- Planning the housing stock transformation

(A) A partially controlled transformation of the urban landscape of the refugee settlements will adapt spatial qualities of the community in a contemporary time.

(PI) Recommendation guideline options can be created for the external renovation language on yards and building facades based on the resident's needs.



L15

Fundamental for: L12, R3, R5

5.3 Remembrance Patterns

Remembrance patterns include in their majority spatial aspects that activate the community and do not stand as static objects in the built environment but engage with community practices. Practices that engage and contribute to community building through activities that embrace and reintroduce elements of the heritage and memories of the community's past while improving daily life.

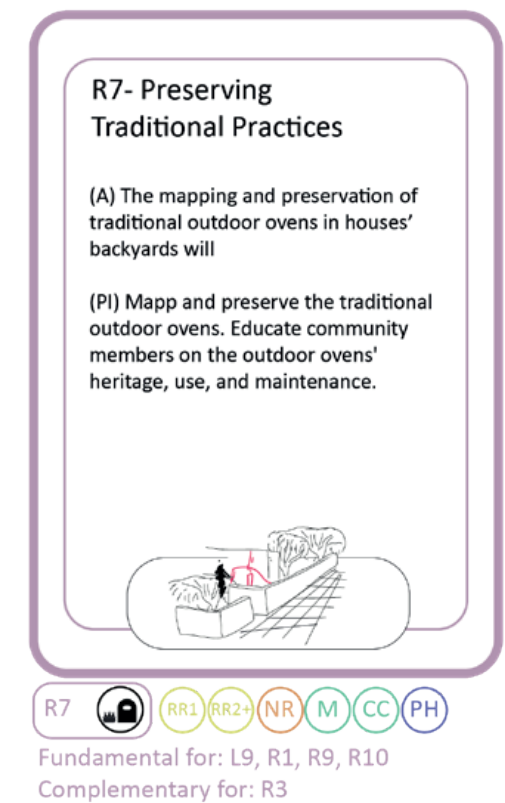
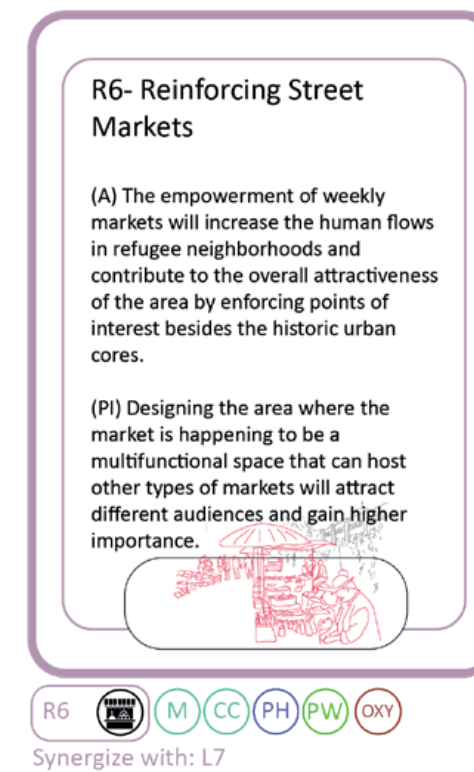
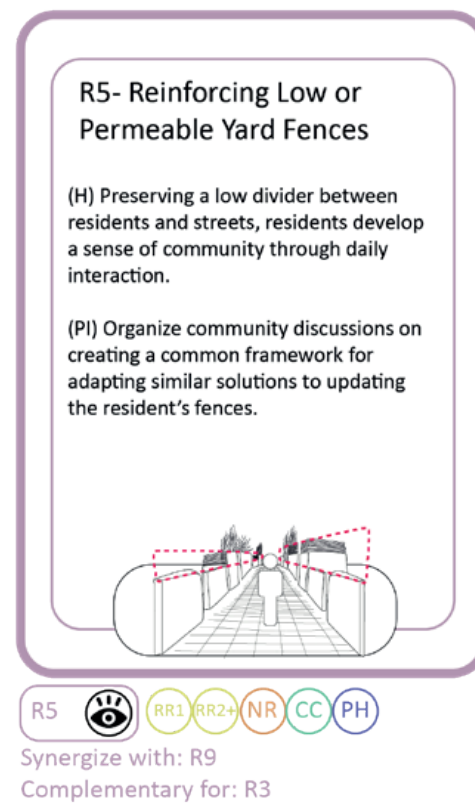
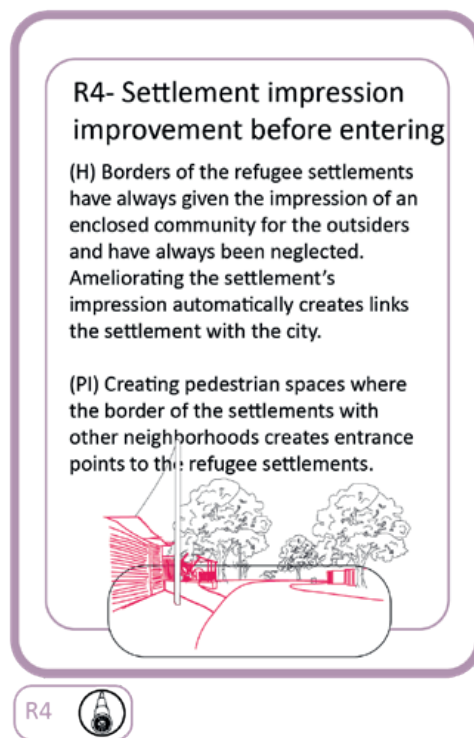
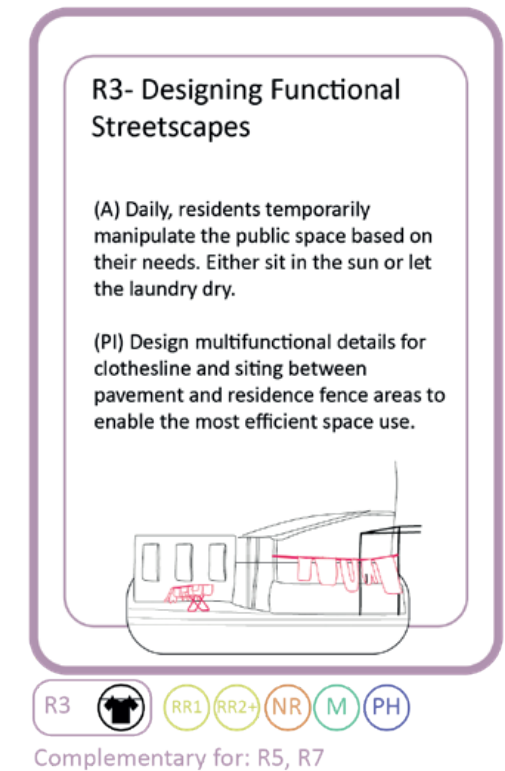
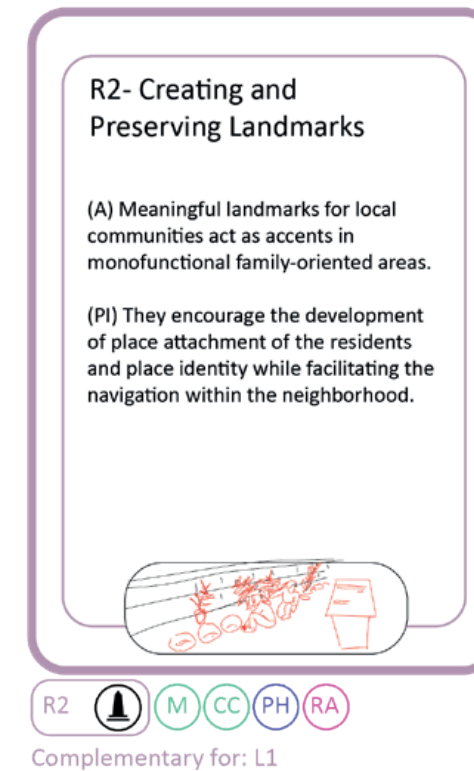
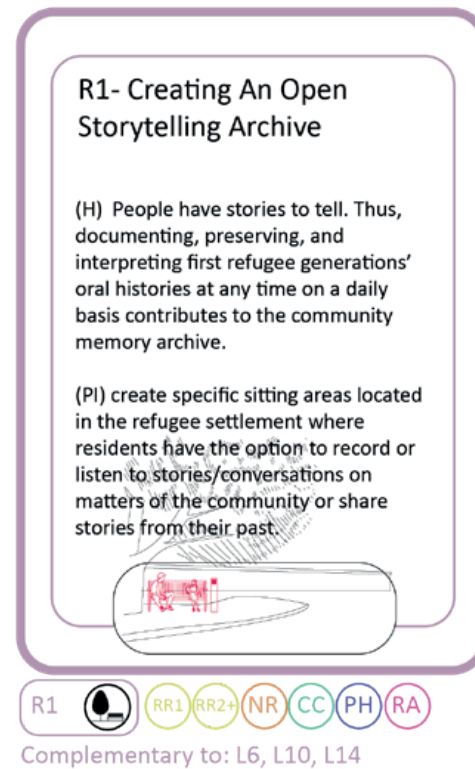
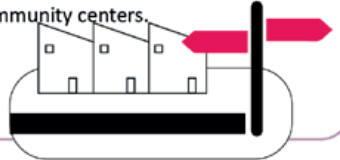


Fig. 66: Spatial patterns with a significant impact on the remembrance of the refugee community heritage

R8- Binding The Remembrance Street Network

(A) Street names dedicated to the remembrance, of a community through different neighborhoods, form collectively a spatial reminder of the community's origins.

(PI) Map and enrich remembrance street names where a community is not represented. Special sign design on the street and create navigation and information points for clusters of remembrance street names and the community represented in key locations within the refugee settlements with community centers.



R8     

Synergize with: R14

R9- Preserving the Blooming Gardens

(H) The yards of the refugee settlement houses contain vegetation that reminds or, in some cases, came from the place of origin of the first residents, the first-generation refugees, therefore is a connection with their past.

(PI) Organize community and local initiatives for recording, preservation, and empowering vegetation in front yards while creating local seed banks in community centers.



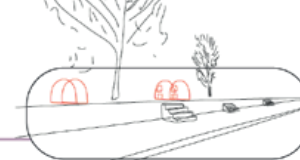
R9     

Synergize with: R5, R12

R10- Baking Collectively

(H) Collective meal preparation used to be a daily habit for first-generation refugees while living in tents; through reconstructing this activity, the refugee generation can interact and share experiences, hopes, and concerns.

(PI) As collective privately accessed areas, parts of apartment block terraces can be designed as shared spaces for residents to encourage them to use, including traditional ovens and preparation spaces.



R10       

Synergize with: R15, L10

R11- Missing persons memorials

(H) Having a place to remember and remind residents of refugee settlements the missing and lost relatives due to the Turkish invasion ensures the community's connection with their collective traumatic past while connecting the community members through creating local landmarks-reminders.

(PI) Create local landmarks dedicated to missing and lost persons related to residents of the refugee settlements.



R11 

R12- Creating Local Urban Farming Organizations

(A) First-generation refugees in a rural community that was forced to urbanize spatialized their experiences through informally cultivating the plot leftovers adjacent to their houses. Thus, creating an urban cultivating culture links the refugee community with its past.

(PI) Creating local initiatives to educate and familiarize new residents with urban farming while helping elderly residents cultivate their plots where needed.



R12      

Synergize with: L4, L9, R12

R13- Preserving & differentiating neighborhood qualities

(A) In an era where urbanization is happening excessively everywhere, ensuring that the refugee neighborhoods remain family-oriented environments and maintaining a high percentage of single and row houses preserve the essence of the rural communities that the residents once came from.

(PI) Introduce legislation for the housing typologies of refugee neighborhoods.



R13      

Fundamental for: R3, R5, R6, R7

R14- Reminding The Places of Origin

(H) Viewpoints are essential for improving the navigation and orientation within the settlement. Having a visual connection with spatial reminders of the frozen conflict in Cyprus serves to remind the refugee community's necessity for a fair solution and thus atone with the community's collective past.

(PI) Viewpoints to the buffer zone, the occupied part of Cyprus or the Pedaios river (passing through the buffer zone), and linear parks connected with pedestrian networks, can serve the role of places of interest, landmarks, and reminders of the community's origins.



R14       

Synergize with: R8

R15- Facilitating Gathering Meals

(H) Meals as Collective Memory investigate, celebrate, and document the refugee communities' food culture.

(PI) Local refugee communities organize collective meals regularly, where community members of various refugee generations, friends, relatives, and new residents in the refugee settlements can share stories, experiences, and food culture.



R15       

Synergize with: R10

5.4 Pattern Language Spatial Categories

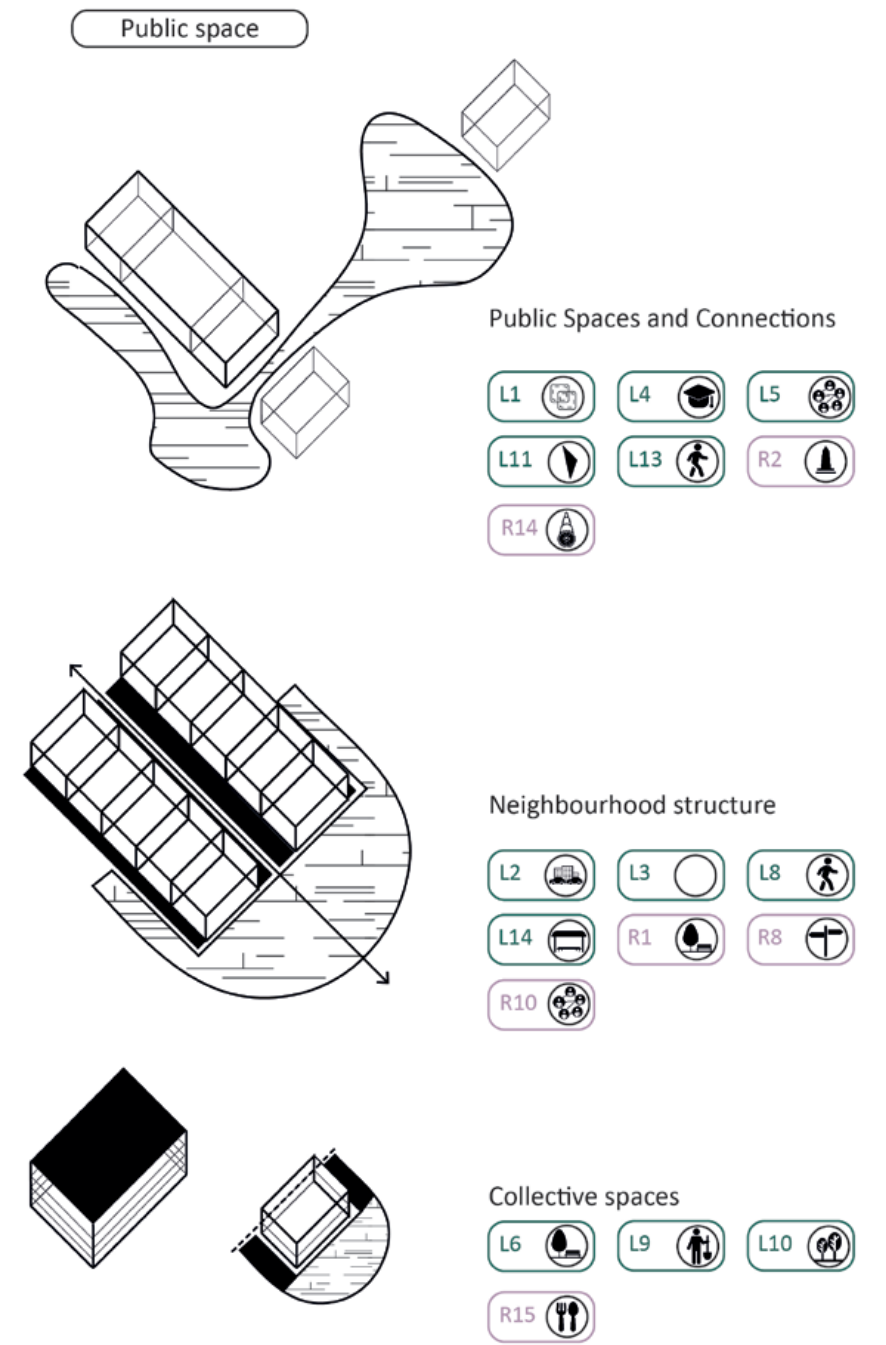
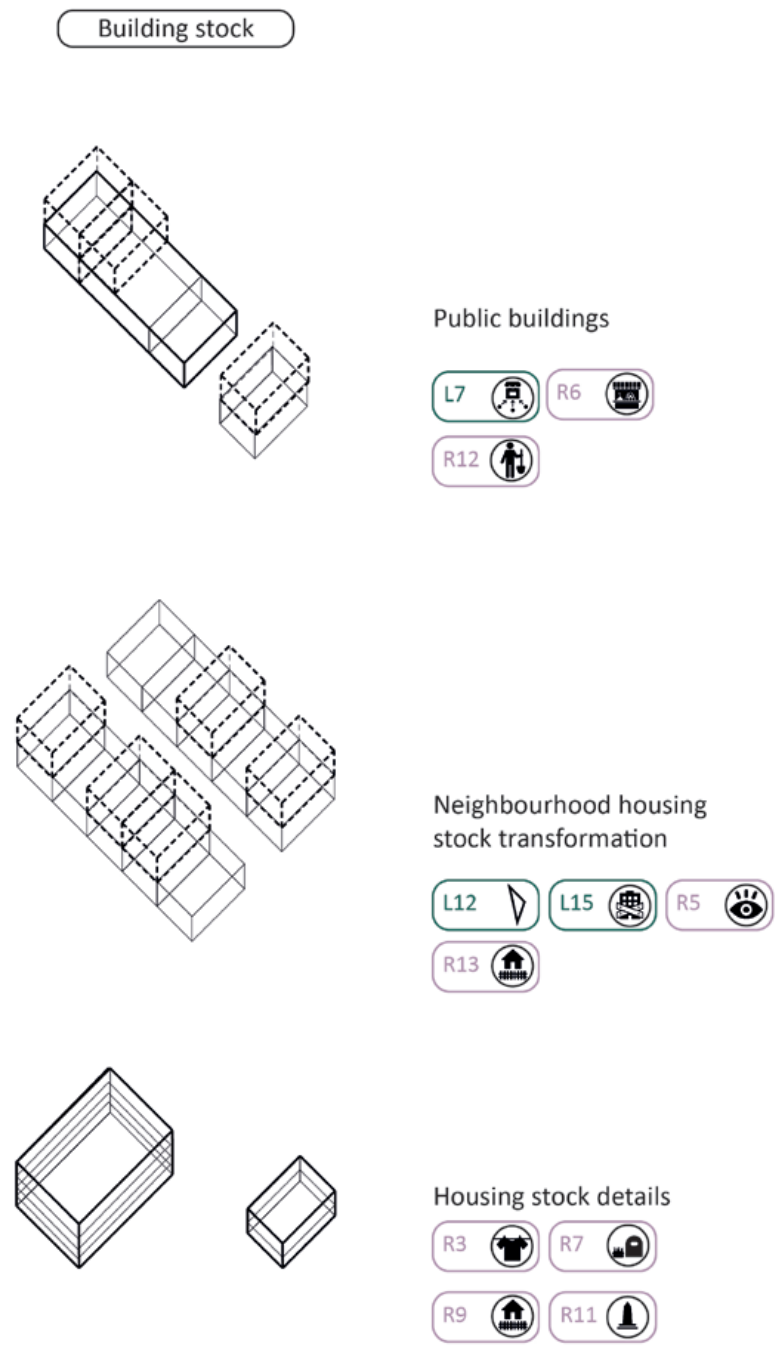


Fig. 67: Spatial pattern classification among spatial qualities of the refugee settlements

5.5 Pattern Field

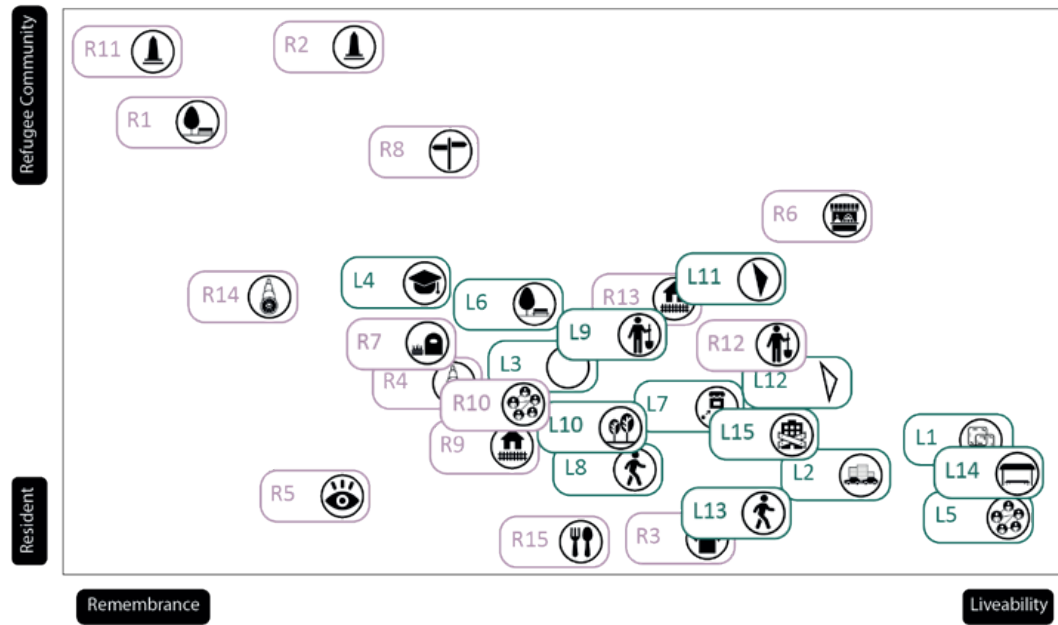


Fig. 68: Pattern field

It shows how patterns form a network through their relation and position within the pattern field. All patterns are linked with the remembrance of the refugee community in the refugee settlements. Still, through their path and dependency, they involve specific features and affect a different community subgroup. The pattern field indicates the openness of a pattern or the level of applicability in a different context.

The patterns created were based on criteria that ensured the overall pattern set coherence quality. Patterns are made based on their findability, understandability, helpfulness, and the general acceptability of the users. These conditions ensure that patterns are found easily within a meaningful categorization. They are written in a simple way and provide the user with the necessary information for the pattern implementation.

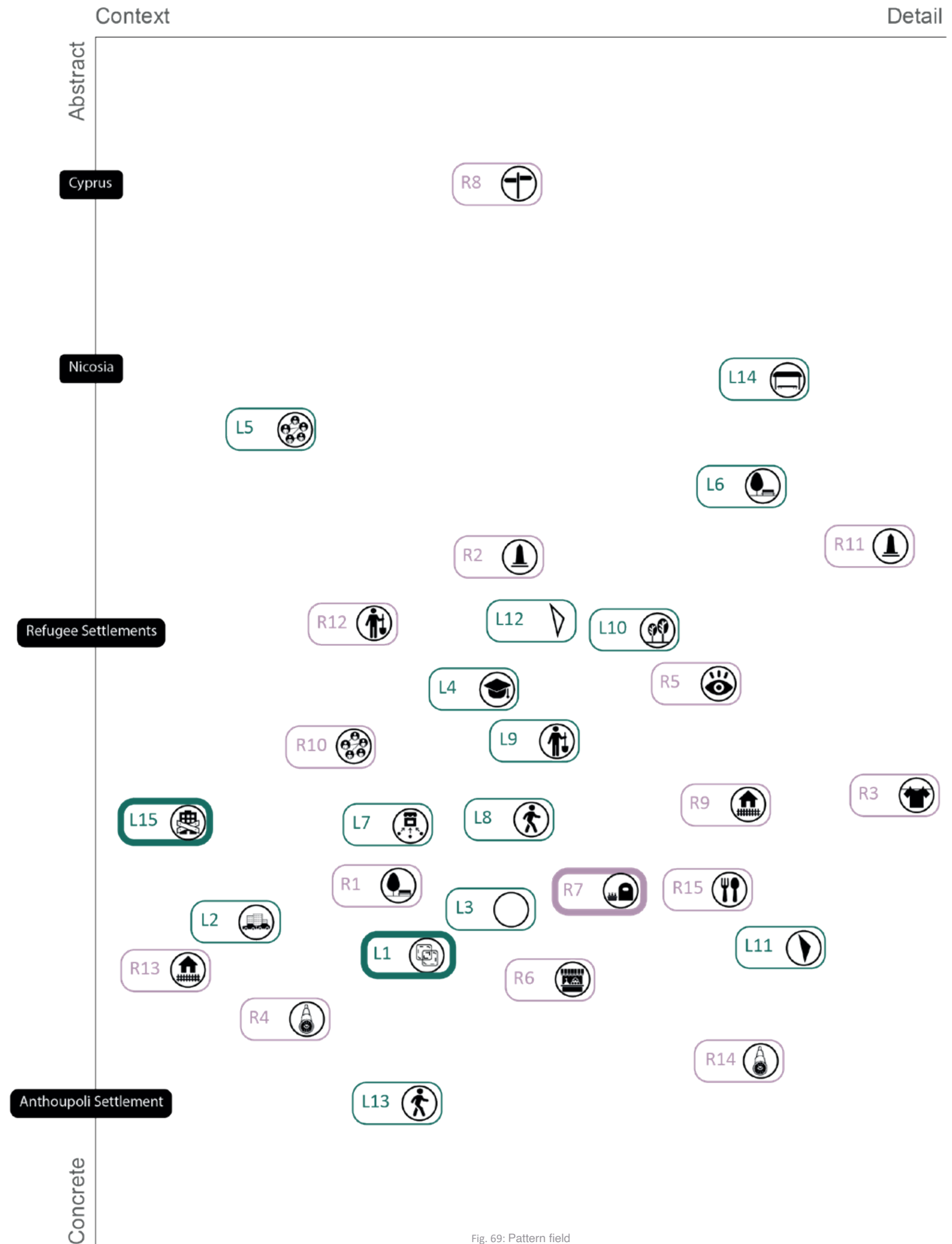


Fig. 69: Pattern field



6 . O p e r a t i o n a l C h a n g e a n d D e s i g n T e s t i n g

An exemplary case study of the pattern application in the Anthoupolis Refugee Settlement in Nicosia is presented in this chapter.

6.1 Anthoupolis Refugee Neighborhood

Anthoupolis governmental settlement is one of the largest refugee settlements in Cyprus. It is estimated that its residents have formed the local refugee community from at least 101 Cypriot-occupied villages (Community Council of Anthoupoli Settlement, 2022). The settlement was created in two phases, the first in 1976 and the second in 1980. Like most refugee resettlements, Anthoupoli Settlement was built relatively close to Nicosia's Centre by car and in an area where the cost of land was low. Like in many cases of refugee settlements larger than four hundred housing units, the once farmland close to a few tiny sparse houses was transformed into dense urban environments that attracted gradual urbanization around their borders over the years (Fig. 72). For the Anthoupoli settlement, this was the case. Before 1976 the landscape consisted of farmland and was uninhabited, and there was only the monastery of the Archangel.



Fig. 71: Strategy goal diagram



Fig. 72: Landscape transformation of the Anthoupolis refugee settlement. Data retrieved from: <https://eservices.dls.moi.gov.cy/#/national/geoportalmapviewer>

6.2 The Layers of Anthoupolis Settlement

The Anthoupolis settlement can be distinguished in multiple layers. The housing stock, including primarily family homes has accommodated a massive number of inhabitants that is gradually decreasing through the years. According to the 2001 census, the Settlement had 2487 inhabitants, while in 2011, the inhabitants declined to 1756. This is a result of rather a combination of reasons. Initially, the one-to-three-bedroom houses housed up to ten member families. Family members moved to their own homes outside the settlement over the years. Therefore, a decrease was expected. But adding to the expected reduction is the abandonment of the properties due to their poor structural condition, lack of maintenance, and small household size. These facts are responsible for the aging population cluster formed in the settlement.

Points of interest within the settlement include a shopping center has a grocery store, a cafe, butchers, and other shops in the settlement center. In addition, every Sunday morning, a flea market takes place in the community center. Additionally, the settlements include two churches, a kindergarten, a primary school, and a high school. These public uses to convert the area to one of the independent refugee settlements, with their community council, and with uses of supralocal importance.

Finally, through the years it is noteworthy that parts of the settlement were rebuilt. The old apartment buildings were demolished, and new ones were built in their place. It should be stated that this is not the case for many other refugee settlements. Furthermore, the community center and

some houses have already been repaired but are still not updated sufficiently to form an attractive community center for all generations. Central green structure, like in many settlements have been under some maintenance, but not sufficient to attract residents to pastime or pass through it. Several locations within Anthoupoli Settlement attract groups of residents. Locations are used from different age groups use each area.

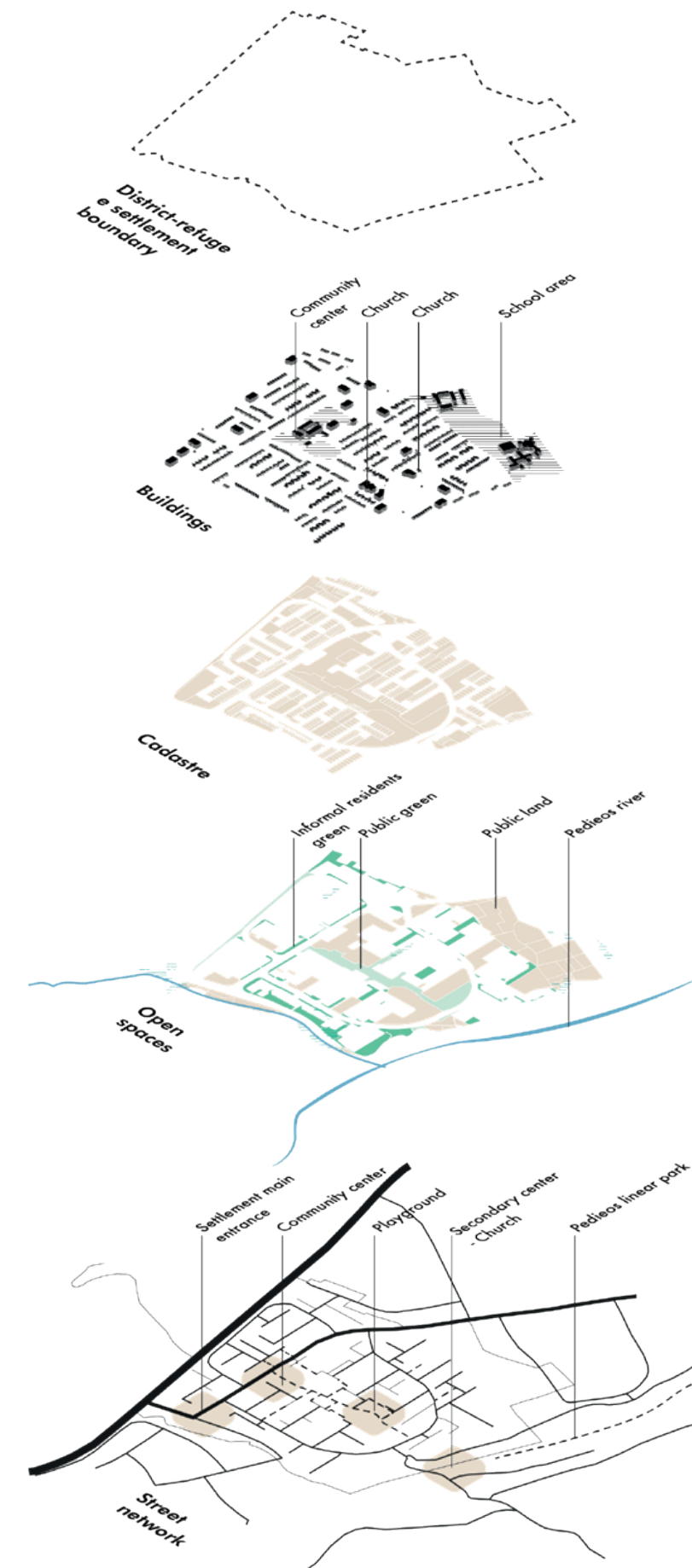


Fig. 73: The layer approach diagram on the Anthoupoli refugee settlement. Data retrieved from: QGIS, <https://land.copernicus.eu/local/urban-atlas>

6.3 Patterns Application

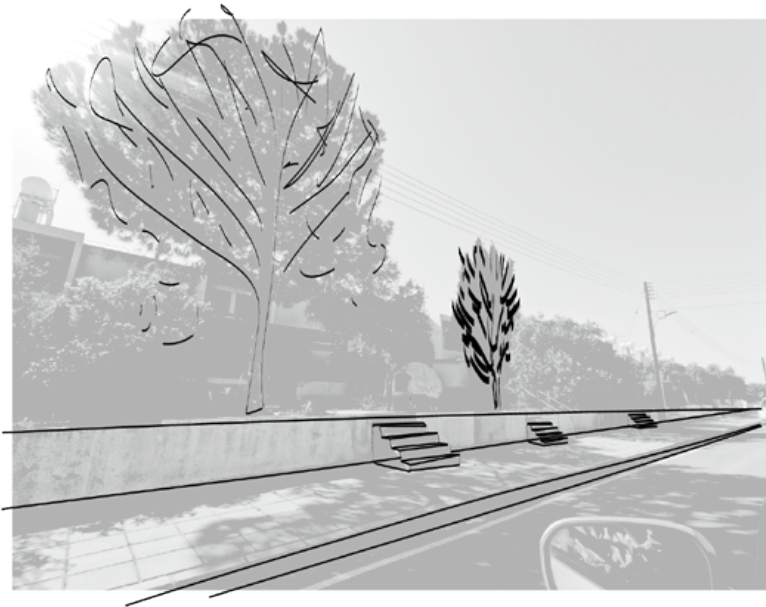


Fig. 74: Example of collective meal preparation

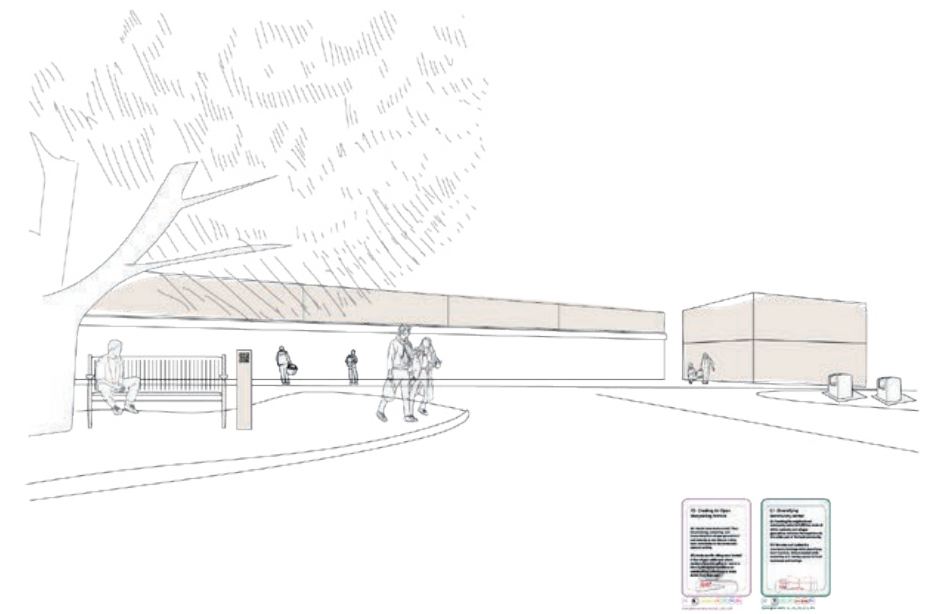


Fig. 75: Example of community center

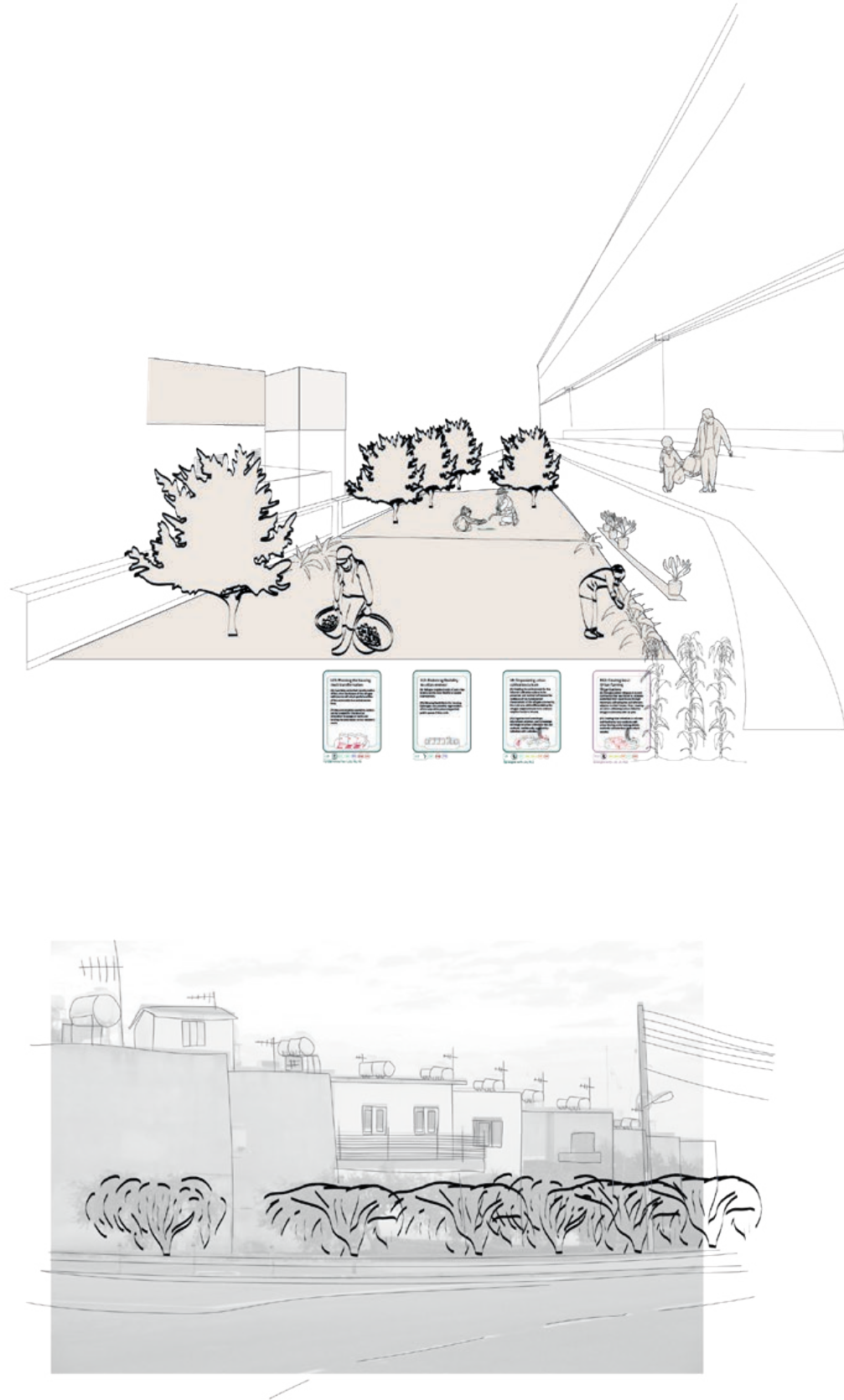


Fig. 76: Example of urban cultivation

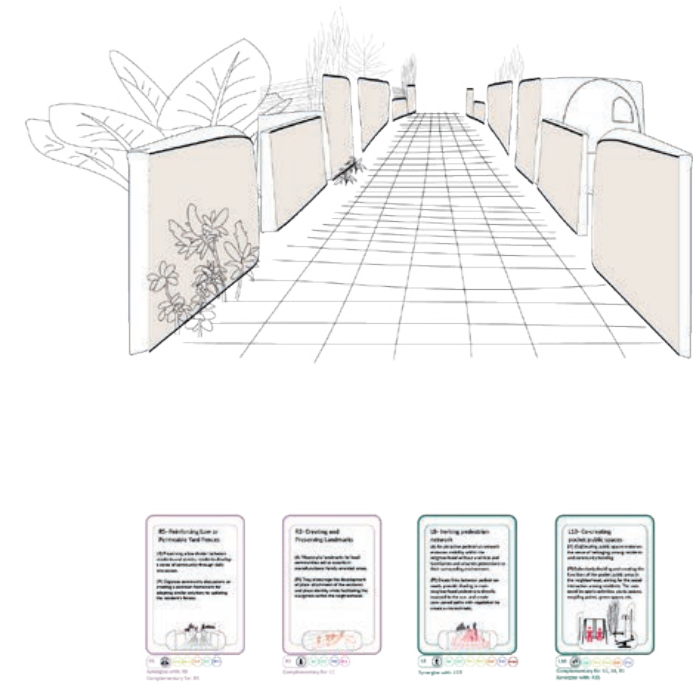


Fig. 77: Example of rowhouse streetscape



Fig. 78: Example of public space

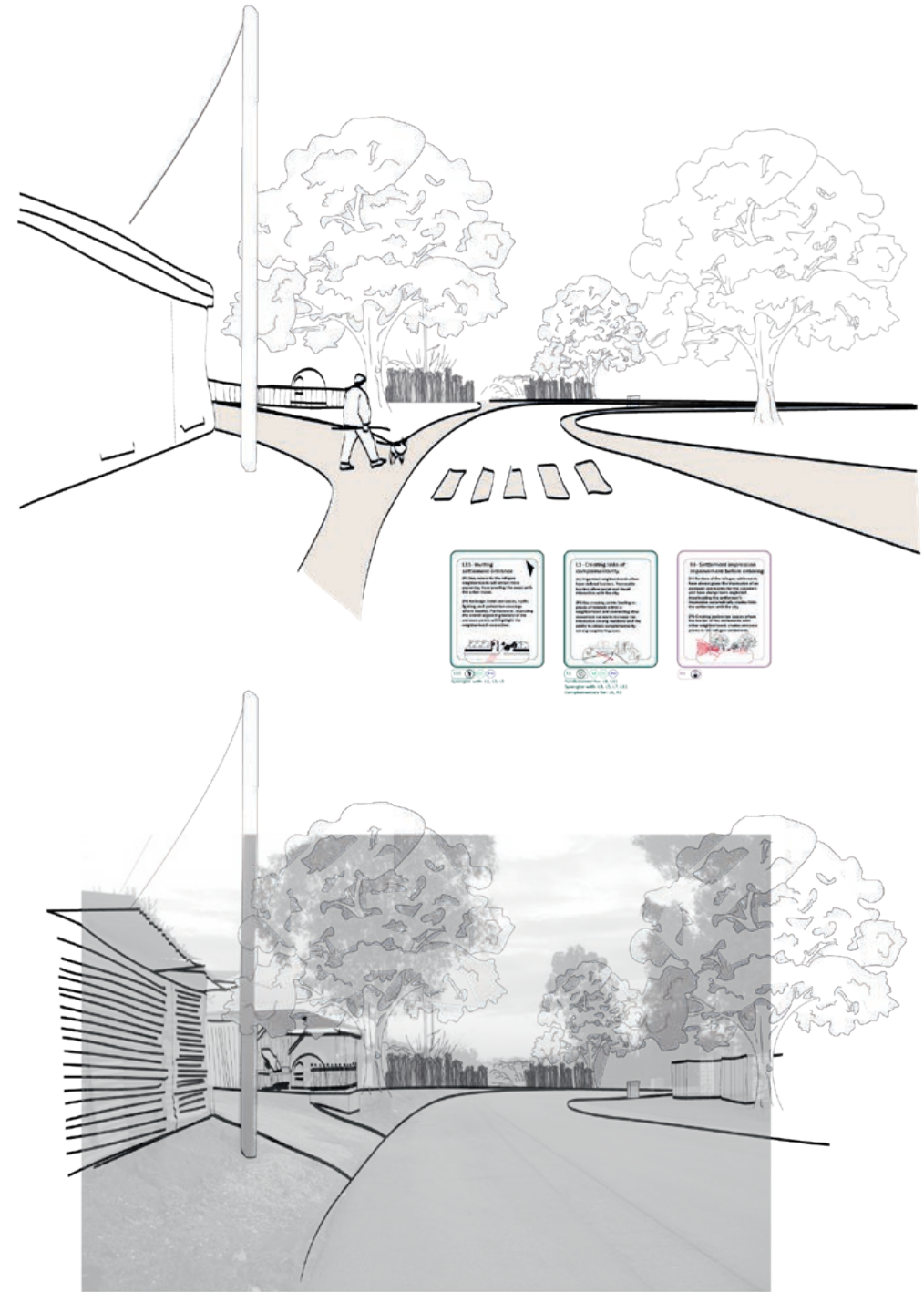


Fig. 79: Example of the refugee settlement border

After testing the capabilities of the pattern application in various areas in the Anthoupolis settlement, it is noted that the impact can be distinguished in three distinct categories, built environment, green structure, and connectivity. The predominant problem of the neighborhood is the engagement of the community. Through empowering already existing informal practices, and allowing community activities, such as the collective food preparation intangible parts of the community's past are ensured while gradually improving the overall place attachment and liveability through small local actions. The preservation of the overall family environment in the neighborhood with present terms creates space for organizations to contribute to the reconstruction of the Anthoupoli settlement image. An image that reintroduces the environment of the neighborhood as a space equal to the rest of the city while maintaining spatial traces of the community's heritage and traumatic past.

The impact of the individual patterns can be expressed in its maximum extend in the Anthoupolis settlement due to two main aspects. The first is the settlement and community size and population and the second is the already existing community council of the refugee settlement. These aspects create the opportunity for NGOs like 'Oxygono' to join the local discussions and invest in Anthoupoli for the creation of a vision of an inviting and desirable future including opportunities for younger generations. Thus, Anthoupoli can derive the role of one of the pilot projects on pattern testing, evaluation, and redevelopment before upscaling the pattern language in the wider network of the refugee settlements.



Building stock



Green structure



Infrastructure & Mobility

Fig. 80: Strategy diagrams on the Anthoupolis settlements



7 . C o n c l u s i o n , E t h i c s & R e f l e c t i o n

Conclusions on the Cypriot refugee settlements and the refugee community as well as on the research thesis process, chosen tools and methodology and results are included in the following chapter. The chapter later expands on the thesis relevance and the encountered dilemmas and limitations.

Fig. 81: Perspective from Anthoupoli Settlement with a view of the occupied part in the background, Nicosia, January 2022

7.1 Cypriot Refugee Settlements and Refugee Community Spatial Integration

The refugee settlements were in the spotlight during the Governmental Housing plan duration, 1974-to 1993. Since then, the refugee settlements emerged into a forgotten urban environment, an invisible spatial pattern of the de facto division of Cyprus.

The refugee settlements symbolize urban neighborhoods where strangers evolved into residents who know each other and greet each other in the street. Today, they form a community that shares common traumatic and heartwarming experiences, agonies, and hopes. At the same time, they represent a complex, legal-political dimension of the Cyprus conflict in terms of their property rights in the occupied part of Cyprus. The refugee settlement residents often consisted of families and individuals that would have struggled to restart, providing sufficient income, such as large member families, elderly, and families with missing persons, usually fathers. Consequently, the refugee settlements embody the sense of a community where group members share the same characteristics, struggles, and experiences.

The frozen conflict in Cyprus led to the gradual privatization of the refugee settlements over the years. During the temporal stays of the refugees in the social housing settlements, the initial promise of the state to the refugees was not kept. Along with the almost complete privatization of the housing units of the refugee settlements to refugees, temporary residents became permanent.

Opportunities concerning the residents-owners, vulnerable groups, and the spatial re-formation of

the settlements through a holistic spatial planning approach were abandoned. The privatization of the housing units implied that housing units that were not designed nor modified for their end user were entitled to refugees who could not afford the modifications themselves. An action that branded the refugees as a low and lower-middle-income group caused disappointment and an inability to place attachment.

The privatization also meant that an opportunity for social renewal of the residents in need of social community housing was lost. An accomplishment could be achieved through a rental scheme of housing corporations for immigrants and low-income individuals.

This thesis acts as a humanitarian response to preserve history more physically in the long term. The community-led strategy aimed at endorsing the empowerment of the refugee community in the refugee settlements while integrating new residents and new members of a community. A community is formed through individuals sharing a different extent, shared collective memory from events, or sharing the same characteristics with a group of people. Aspects that make them feel a sense of community and attachment to their lining environment.

Remembering all the different decisions, people, and actions that have shaped the Cypriot refugee settlements, the essence of the current thesis is embodied in the pattern language and the analysis behind it.

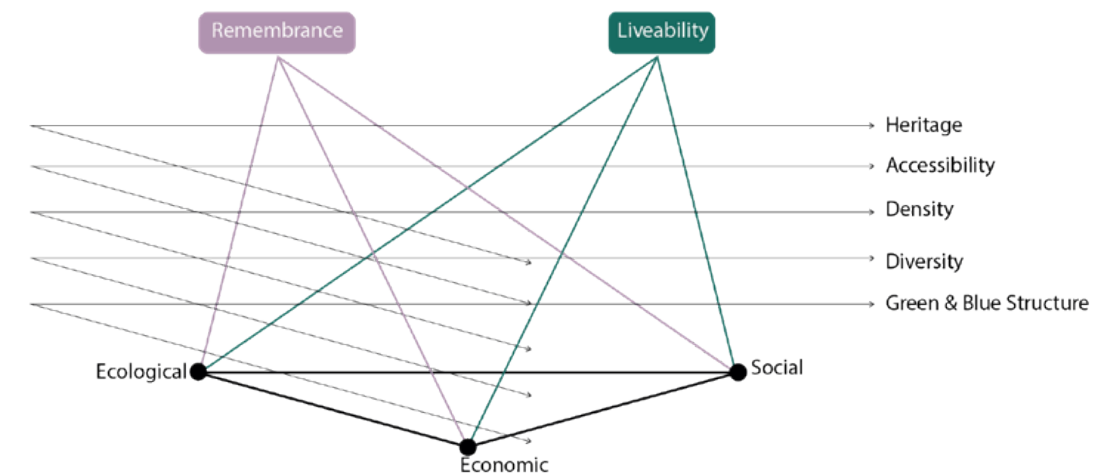


Fig. 82: Diagram illustrating the interrelation among the different layers of the pattern language in communities in conflict environments

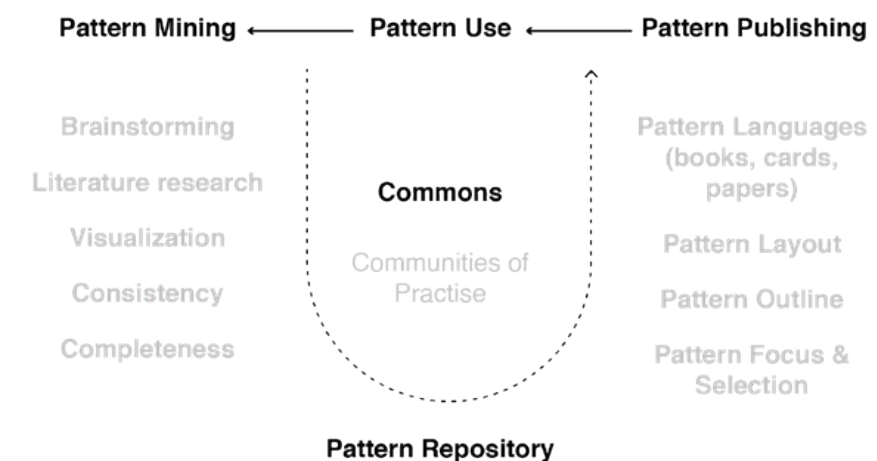


Fig. 83: Pattern workflow model for creating, publishing, and transforming patterns, Diagram based on: (Leitner, 2015)

7.2 Pattern Transferability & Evaluation

Patterns refer to a participatory building and design process. They form a constantly changing system where self-organization and creativity are enhanced. Pattern language enables the people affected best to be involved in the design process. The remembrance and liveability patterns aim to create a common language for involved and potential stakeholders of the refugee settlements, then discussed around the same table. Subsequently, they can work towards approaches which link formal and informal activities to bridge identity, liveability and space.

The patterns represent an ongoing upscaling circular process of pattern mining, creation, application, publishing, and many in-between steps. Therefore, pattern knowledge, use, and impact are constantly redefined through the continuous redefinition of the patterns through the community and actors involved (Fig. 87).

Pattern collections are a foundation for dialogue between everyone involved. Our world can be understood as interwoven by conscious and unconscious patterns, whereby each pattern is linked to other patterns. Changes in our world appear in new patterns emerging or existing ones changing. All design patterns considered together as a complete form humanity's cultural heritage, which can only belong to all of us together. Pattern descriptions are a form of sharing this heritage with others and making it accessible to all people in their own lives and surroundings. Pattern descriptions are tools for involvement in decision-making and participation in continually making the world a better place in a joint, creative, cooperative, and consensual process. However, we have yet to begin doing so rationally and on a larger scale.



Fig. 84: Refugee settlement characteristic typologies based on settlement size and housing number

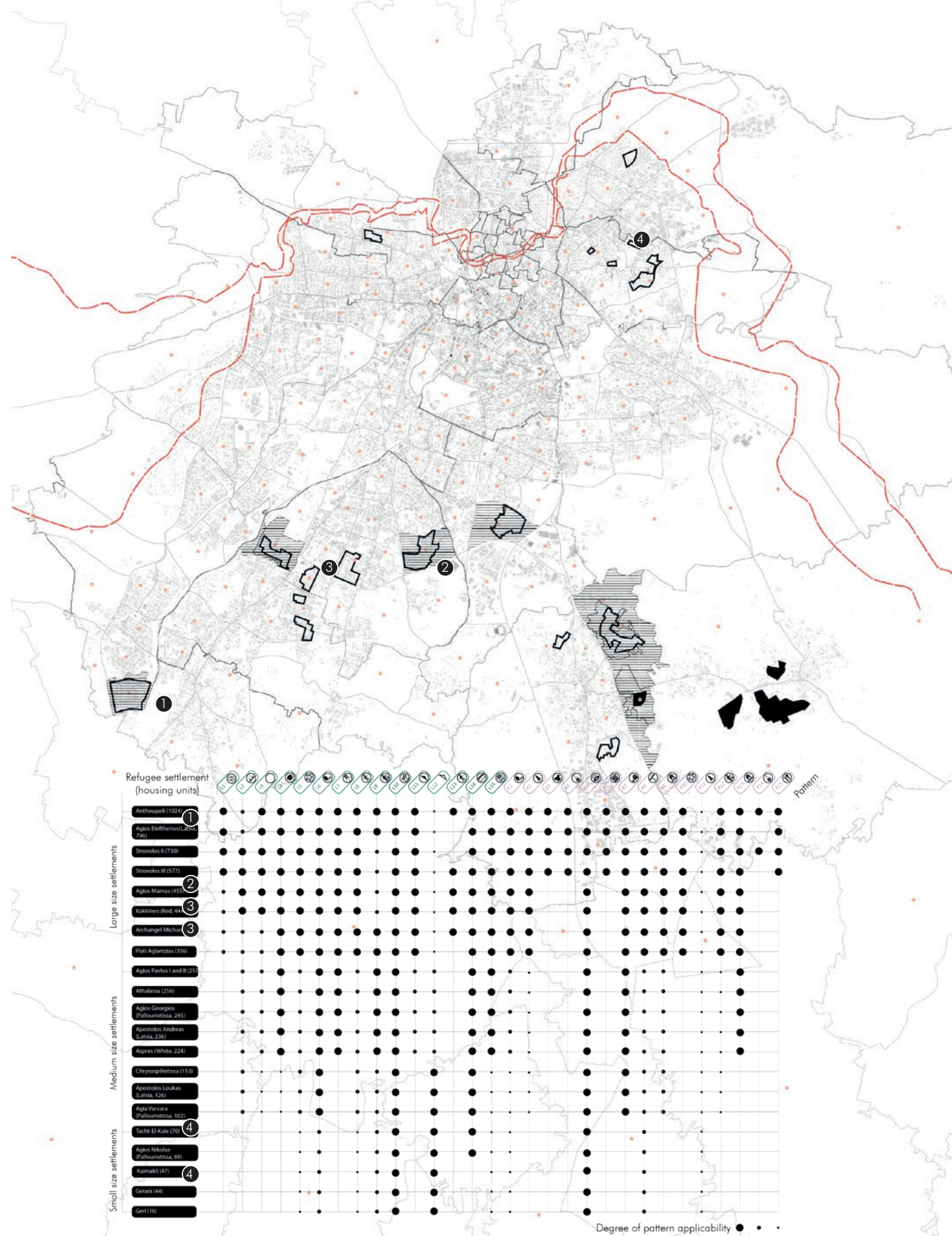


Fig. 85: Pattern transferability diagram

7.3 Responses to The Research Questions

How can community-led spatial planning enable the Cypriot refugee settlements to be transformed into livable environments while preserving the memories of their initial inhabitants?

Through defining the community to which the spatial planning is directed. The conclusion that the refugee community consists of different generations with different experiences and needs has also influenced the evaluation of the memories valued to be 'preserved' and the liveability needs of the community.

the main conclusion of the stakeholder analysis is that collaboration among actors and stakeholders in Cyprus is complex and, in many cases, still absent. Thus, the preparation for community-led spatial planning needs based on a vulnerable community first needs the community's practice. Simultaneously, all actors and stakeholders must create a common language and sit equally around the same table. For this reason, the choice of pattern language during the thesis project is the starting point of this preparation. A pattern language is a method that describes aptly and straightforwardly problems, potential actions, and solutions that reoccur in space. Thus, patterns have the potential to deconstruct the complexity of the issues, needs, and heritage of the built environment that represents the refugee community and reconstruct it based on the essential elements for the community to be reminded of their past while creating

an equally attractive spatial future.

Spatial patterns:

What did the Cypriot refugee identity evolve through time, and how was its relationship with the refugee settlements? What is the current state of the refugee settlements in terms of liveability?

The refugee identity is the institutional bond that defines the refugee community. The current refugee community is not as homogenous as it used to be. Time has transformed the community into a more diverse group of people in which not all group members are attached to the community to the same extent. It includes different generations, inheriting the refugee identity from the first-generation refugees. Additionally, to the other refugee generations that feel attached to their identity differently, refugees have had a different extent of governmental manipulation through the decades, depending on their housing scheme plan.

Time has dramatically increased the trauma, disappointment, and lack of hope and attachment to the first-generation refugees. This situation is enforced by the state's treatment of the refugee settlements over the past decades. The overall Cypriot frozen conflict has had a linked frozen planning process for the refugee housing plan. Therefore, the most affected group of refugees are those living in the governmental refugee settlements. The partial renovations and planning through

the years deprived a holistic vision of the refugee settlements.

Spatially, the current liveability state of the refugee settlements is under question. As an external observer of the refugee settlements, it is concluded that the refugee settlements suffer from severe liveability problems. As the refugee settlements embody an aged refugee population, structural issues of the housing stock that lead to the acceleration of their abandonment and decay also negatively influence the residents' daily lives.

Socially, the lack of holistic spatial planning through the years for the evolution and transformation of the refugee settlements has allowed the residents to form and behave in space unexpectedly based on their needs. In short, informal pocket cultivation plots have created a community environment that conveys safety and cooperation among community members. The refugee identity represents a population that has suffered the most consequences of the Cyprus conflict and maintains the strongest desire for a fair solution to this conflict. Therefore, keeping this identity is an instrument for constructive dialogue and cooperation among Cypriots. In the future, the refugee inherited memories will be one of the few common grounds from the past that connect Cypriots.

What are the social characteristics and the spatial patterns of the refugee settlements, and how do they differ from other urban

neighborhoods' socio-spatial patterns in the region?

A fundamental difference between the spatial patterns of the refugee settlements and a regular neighborhood in Cyprus is morphological at first glance. As the only paradigm of organized areas with primary residencies in Cyprus, the refugee settlements are defined as dense mono-functional urban environments. The analysis has depicted that morphologically they differ. They include, in some examples, community centers, a spatial pattern that refers to rural settlement centers and create a sense of micro-society. Additionally, a high number of dead-end roads enclosed by highly accessible peripheral to the settlement roads, a spatial pattern that has demonstrated the refugee settlements as unknown parts of the city, as the network configuration is not inviting non-residents to familiarize themselves with the neighborhood environment.

At the same time, the refugee settlements as a lived space have intentional and unintentional spatial patterns directly linked with the social characteristics of first-generation refugee residents. Intentionally linked to monuments such as the still missing relatives since the 1974 Turkish Invasion, street names of places of origin of some refugee residents. Unintentionally linked to rural life characteristics, such as plantations, cultivation, and the need to connect with nature.

How can the right to remembrance be spatialized conceptually, and which spatial factors influence the right to remembrance seen in theoretical notions in the fields of psychology and spatial design?

The conceptualization of spatializing remembrance has different paths depending on the audience, archive, and event. For instance, the spatialized remembrance concerns all the different generations of the refugee community and the new residents of the refugee settlements that are luckily non-refugees. The first group of people needs to remember, be reminded, and atone with their past. The refugee settlement space functions as the environment of atonement. By creating spatial patterns on the spatial elements that refugees unconsciously created through the decades and represent part of the community heritage, the refugee community can connect with its past while the refugee settlement residents familiarize themselves and attach with their living space.

Which spatial patterns are expressions of the refugee memories in the refugee settlements in Cyprus?

First generation refugees consisted of a rural population forced to urbanize. Thus, the main pattern reflecting the refugee's background is the informal cultivation of the areas between the street and the refugee houses. In short, the green structure of the settlements, including

the informal cultivation plots, the house's front yards, parks, memorials, and pocket green spaces, are spatial aspects created through refugee actions and thus function as a spatial representation of their memories.

Community Building**How can the planning process build a community in a conflict environment?**

Through a holistic understanding of the community that plans small actions with substantial change.

What is the degree of place attachment of their residents? What factors are responsible for their decay, and what has the potential to contribute to community building?

Through all the different chapters of the thesis, a concrete understanding of the central pillar of the refugee community, the first generation of refugees is their strong but now silent desire to return to their 'homes,' their places of origin, nearly forty-eight years after their forced displacement, and about after they have spent a whole lifetime in a borrowed place. Thus, place attachment was not developed sufficiently through the years. Collective solutions to key problems of the settlements have the potential to motivate and empower the community to unite and recreate a livable environment.

7.4 Societal Relevance

Part of Cyprus's contemporary heritage is the identities of the Cypriot refugees. The most significant part of them is spatially identifiable through the refugee settlements. Thus, understanding the current social consistency of these areas, their spatial characteristics, and all the parties involved that contributed and still contribute to the construction and reconstruction of the refugee identity will depict the urgencies and the key elements that can begin a conversation among actors towards a socially conscious future of the refugee settlements.

This thesis focused on the liveability and remembrance patterns as elements that, through their careful planning, ensure the (re)building of the Greek-Cypriot refugee community. The patterns created during the graduation year focus on the patterns for the Cypriot refugee settlements. During the later phases of the thesis, I realized that remembrance patterns of the refugee settlements are only a tiny part of the broader chapter of remembrance patterns for Cyprus. My involvement in the issue of remembrance embodied in the refugee settlements during the thesis preparation was due to the need to highlight the existence and importance of the remembrance patterns in the refugee settlements. Undeniably, remembrance patterns of high priority are identified in the buffer zone, Nicosia's divided city center, and the deserted mixed and Turkish-Cypriot villages. The only difference is that remembrance patterns in the refugee settlements incorporate the life of a living community.

In a socially constructed world, the Cypriot identity has undergone severe manipulation. From

Cypriots, ethnically divided over the centuries to Christian and Muslim Cypriots to today's Greek Cypriots and Turkish Cypriots and internally displaced refugees. Thus, the community building in the refugee settlements stands itself as a breathing remembrance pattern. A pattern that embodies the life histories of the first generations forced to form it. An instrument that will be used during negotiations in the future and will have a central role in developing a solution for the Cyprus frozen conflict. Therefore, by endorsing community building on the only breathing remembrance pattern, the perseverance of a reconstructed past spatially linked with the whole island of Cyprus symbolizes hope for their contribution and representation to a fair future solution.

7.5 Scientific Relevance

The interdisciplinarity of the Urbanism track and especially the Planning Complex Cities studio is an aspect that I attempted to reflect through the complexity of my graduation topic. Being part of a research-related studio on spatial strategies and planning, I intended to incorporate this mindset in tackling social and spatial inequalities in the long term, liveability, and remembrance rights of a constructed community, the Cypriot refugees. Therefore, preparing a social group through spatial strategy to reflect and atone with their traumatic past to overcome future challenges.

The primary aspiration for my project was to activate and reform engagement and participation processes to ensure the liveability of the refugee settlements. Future Development and planning in the refugee settlements are also crucial to preserve the Cypriot refugee identity. The refugee identity could be considered an intangible monument for Cyprus, while the refugee settlements are a part of their spatial reflection.

In short, my graduation work, through the development of building community strategy, aims to create a starting point for the current and next refugee generations, along with new residents of the refugee neighborhoods, to acknowledge the past of their living environment, remember, while addressing social and spatial inequalities of the refugee settlements that have had a significant impact on their liveability status. Research can also contribute to the knowledge of the refugee communities and community building through time in different contexts and other organizations on community building approach.

It expands on the collective memories of a community through pattern language while combining the remembrance patterns with liveability, a synthesis of patterns that are not adequately mixed in the current urban environment of refugee communities.

7.6 Advantages and Limitations of the Chosen Methodology

The pattern development path was a way to express and combine the complexity of liveability and remembrance matters, actions, and possible solutions through space. A rather complex approach that was expressed through pattern language, a method that has the potential to be communicated with different actors and stakeholders. A path could be further explored through workshops with other actors in the same room, discussing and developing the pattern language on community building and the refugee settlements. Due to the limited time of the thesis duration and the global pandemic, a pathway was challenging to happen.

A challenge of the current research thesis from the very start was the data collection for Cyprus at a neighborhood level. Given the time of the idea, during the pandemic, where social distancing was still an obstacle to human interaction, on-site data collection was complex due to the pandemic measures. In contrast, GIS data collection on the neighborhood scale was minimal and time-consuming to discover. Therefore, the line on locating data for the Cypriot Refugee settlement derived the role of the master course transferability check. The knowledge obtained during the master's, in the Dutch context, where data are widely available, was attempted to be adapted in a context where data were not widely known.

7.7 Strategy Impact and Transferability of the Project

A vital aspect of the strategy that influences its impact is the differentiation of the pattern's audience. The process was formed using pattern language, enabling flexibility and adaptability of the patterns created through different contexts and conditions. Therefore, patterns were developed based on the liveability context of Nicosia, on essential elements, activities, and qualities of the refugee community that deserve to be preserved and reminded to the next generations of the community of Cypriot Refugees and residents of the refugee neighborhoods. The case of the Cypriot refugee settlements can then form a case study that concentrates on different spatial patterns of community building patterns through both remembrance and liveability of the community. A case that can be used to be built upon and enrich similar cases on community building strategies with similar characteristics to the Cypriot Refugee community.

The Cyprus refugee paradigm indicates that refugee camps and refugee settlements are more permanent than temporary with the ongoing Ukraine conflict and other conflicts of the past decade. Therefore, while refugee housing solutions are urgently designed in a short period, this thesis project is evidence that they need to be carefully thought out.

7.8 Ethical Issues and Dilemmas Encountered

Undoubtedly, planning frameworks and strategies in conflict environments are sensitive, fragile, and challenging to address. Preserving and attempting to manipulate the construction and reconstruction of the refugee identity through the next generations and the refugee settlements is a question of ethics. Enabling regeneration in the refugee settlements will benefit a part of the remaining refugees while also risking resulting gentrification in the long term, thus relocating the remaining refugees for a second time to the city's fringes.

The preservation of meaningful aspects of the refugee community while ensuring the refugee settlements' liveability were the two main urgencies that were prioritized throughout the research. Exploring community building in conflict environments is also a part of my personal and professional interests, exploring the meaning of the refugee identity that I inherited from my family. Born as a member of a refugee family and raised in Nicosia, observing the refugee settlements from the streets, I am entitled to the insides of the refugee community, their perception and manipulation of the local society, and possible biases formed through the years, difficult to identify. As refugees are highly vulnerable communities that still entail urgency for many societies, ways to endorse community formation and building in the long term are crucial for their assimilation into society, respecting their past, and ensuring a socially sustainable future.



L i t e r a t u r e

Fig. 86: Informal Playground, Strovolos I refugee Settlement, September 2020

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A p p e n d i x

Fig. 87: Anthoupoli Settlement border with Pedieos river, Nicosia, April 2022

Fieldtrip

Aim: Identify the current socio-spatial characteristics of the refugee settlements through empirical research to develop a clearer understanding of the refugees' connection with space, the impact on them since 1974, and vice versa. Moreover, identify the power and influence of the actors and stakeholders involved with the refugee settlements.

Research Method: Qualitative

Process: The fieldwork during the first field trip aims to expand on collecting qualitative data on the larger in size refugee settlements of Nicosia, located in the municipalities of Strovolos, Lakatamia, and Anthoupoli. The data collection was done during the Christmas Period through observations, street interviews, and documentation.

Observations & Street Interviews: During the first part of the field trip, the observations of the refugee neighborhoods will be compared with the statistical analysis of the demographic data. Therefore, observations on the age group of the residents, the way they use private and public spaces, and observations of the current condition of the building stock were made. During the second part, street interviews with residents, their relatives, and local people who transit through the refugee settlements were held to document their life histories, connections with the payments, and feelings about their living environment.

Street interviews questions:

Introduction-explain

Note: gender-age-interview duration, time, date (working day/weekend- location

(Are you a refugee?)
Where are you from, and how long have you lived here?
What was the day like when you came here? And what do you think changed the most?
Thinking back, can you remember one happy memory of this neighborhood?
Can you describe it? (Where was it located? Ask to give directions to a location/ have a map)
How do you feel still staying in this neighborhood?
(For example, do you feel this house/ apartment/street is your home?)
Would you desire your children/grandchildren to stay here?

Documentation: While conducting street interviews and observations at the refugee settlements, the documentation of the neighborhoods through photographs, videos, time-lapses, and sketches will strengthen the observations in the last step while also contributing to the analysis and the planning framework development. Through the form (fig.), the second part of the documentation supports the field trip documentation to create a condensed overview to draw conclusions and guidelines for the second field trip.

Date: 30-12-2021

Time: 15:00-18:00

Weather: heavy rain-orange warning (14 Celsius)

Refugee settlements visited:

Kokkines, Strovolos
Ethnomartyras Kyprianos, Strovolos
Agios Georgios, Pallouriotissa

1. Kokkines, Strovolos

Liveability – General comments

Access to the settlement via car is relatively easy, and the navigation within the territory. The settlement consists of a combination of a dead end and linkage roads, which result in relatively easy access and navigation.

The green structure of the area is inactive and does not provide any functional use to the residents. For instance, the green barrier between the settlement and the high-speed road is non-functional. The green spaces within the settlement are degraded and, in most cases, include some olive trees, which contribute to the general image of the decay of the settlement.

The housing stock condition varies; apartment blocks face structural problems, while row and semidetached houses face tangible signs of decay. Several houses are in good shape, and a smaller number are being renovated.

The public spaces are easily accessible but need updates because they have not been renovated

or updated since their creation.

Remembrance – General comments

Street names and the front yard vegetation, from small pots to large olive and orange trees that have grown over time, symbolize small souvenirs from the refugees' place of origin.

The few buildings under renovation tend to change the area's character by adding high fences and cutting off the visibility and social interaction from the street.

2. Ethnomartyras Kyprianos, Strovolos

Liveability – General comments

The accessibility to the settlement is accessible through the regional roads, but the infrastructure of the secondary roads of the settlement almost does not exist. The narrow streets with a mix of apartment buildings and row houses in a yet car-dominant city eliminate the space for pedestrians, as cars are parked wherever there is space in the street.

Open public spaces consist of a fully paved pedestrian network, enclosed by fences and houses, without connecting any points of interest, which does not contribute to the liveability of the neighborhood. The green structure is mainly found in the private yards of houses and some areas on pavements as trees.

Variation in the housing stock condition. Various buildings were abandoned, and others were renovated. The most significant part of the settlement is inhabited, but the building condition was in decay.

The community center of the settlement with the public uses is not attractive, especially to younger generations.

Remembrance – General comments

Street names and local village associations contribute to the remembrance of meaningful places for the refugees. A large sign indicating the settlement's name while entering reminds us that the area was constructed through the housing plan of Cyprus after 1974.

Many front yards have been converted to parking spaces or have acquired a high fence, decreasing the interaction with the street. The area lacks meaningful and attractive public spaces for the community.

3. Agios Georgios, Pallouriotissa

Liveability – General comments

Easy accessibility when coming from Nicosia city center or the highway. Relatively distant from the other districts of Nicosia, this is also caused by the de facto division of the island.

The small number of the refugee houses that the settlement consists of results in a blurred boundary of the settlement with the rest of the urban environment.

Again, the infrastructure and the public space need an update, there is a problem with the car parking, but the housing stock is in similar condition as the rest of the urban area. The small size of the settlement might have contributed to this condition.

Remembrance – General comments

There is no indication of the refugee group assigned to the settlement, almost like any part of the city.

Date: 04-01-2022

Time: 15:00-17:00

Weather: Cloudy

4. Anthoupoli Governmental Settlement, Anthoupoli

Liveability – General comments

The settlement is in an area that the province of Nicosia has been developing during the last couple of years. Navigation within the settlement is accessible by car or foot.

Houses, apartment blocks, and even the community center have small open green spaces that work in between an urban and a rural farming system. In combination with some larger green areas near the school, church, and playground, along with the empty plots of the settlement, all these consist of the site's green structure.

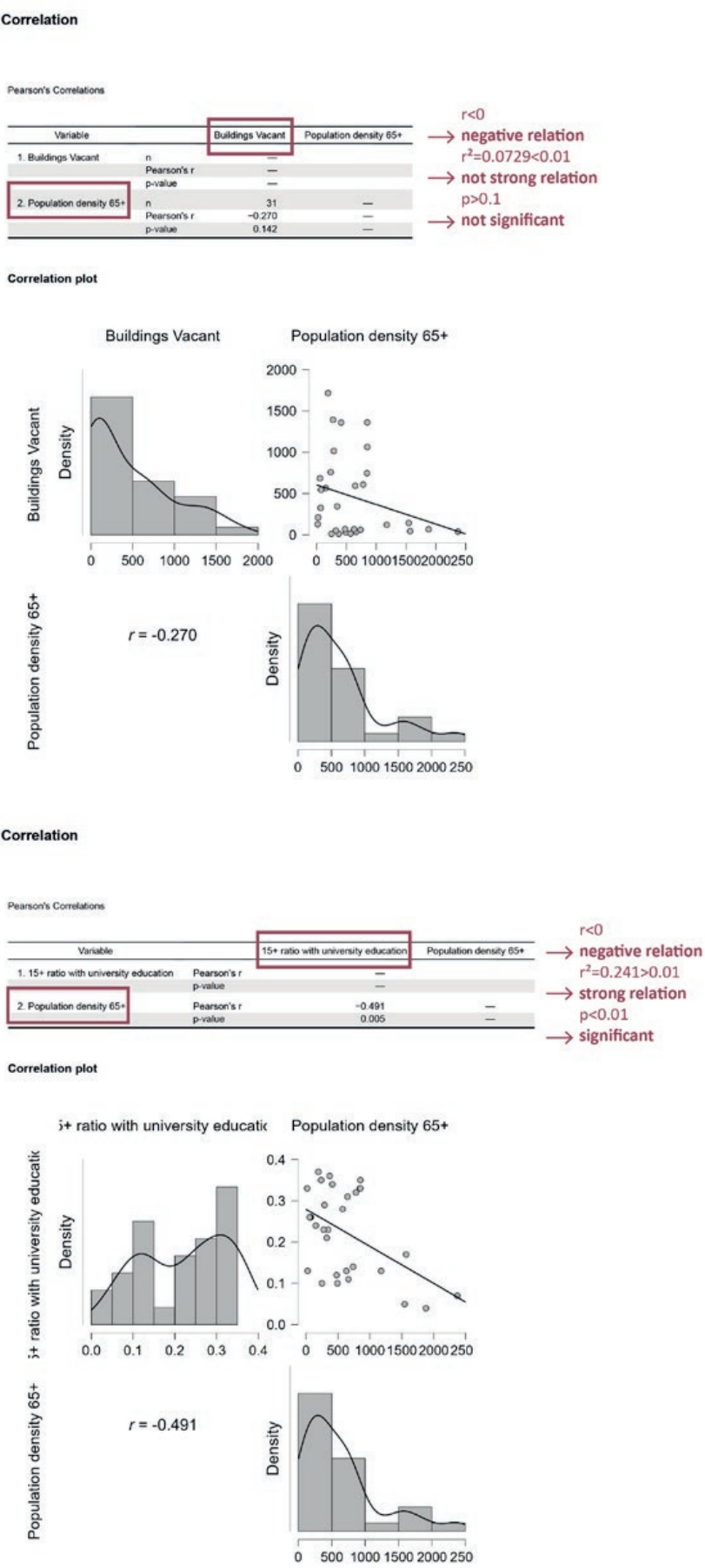
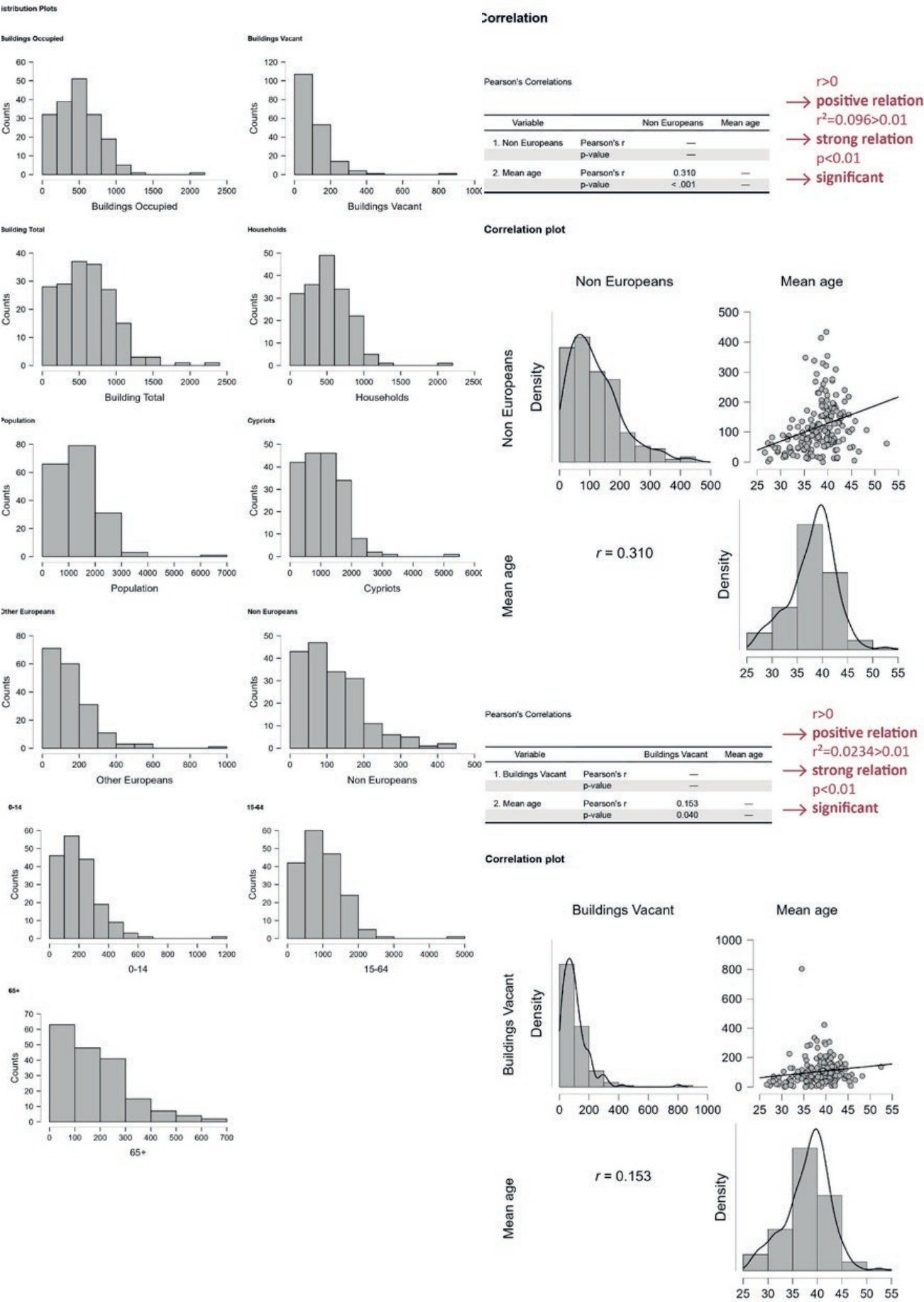
The housing stock condition varies due to the vast size of the settlement, the distinct phases that were built, and the number of housing units. Large unbuilt and unused plots still exist within the settlement.

Due to the vast size of the settlement, the main public spaces of the settlement are formed from the amenities, the church, the school, and a large playground. The distance of the settlement from the Nicosia center has led to the development and conservation of the community center for a variety of age groups.

Remembrance – General comments

The navigation throughout the settlement using transport, car, foot, or bicycle transmits the impression that space functions like a community. An active community center, with people drinking coffee and playing backgammon, a heritage monument for those who are still missing from 1974, traditional ovens in the backyards, flowers, and olive trees in the front yards, all visible from the pedestrian paths and the streets are elements that enable a visitor or a resident to reconstruct an image of all the different life histories that have passed through the settlement.

Statistical Analysis on The Refugee Settlements of Nicosia



Results

Descriptive Statistics

Descriptive Statistics

	Province	Municipality	Postal code
Valid	180	180	180
Missing	0	0	0
Mean			1905.044
Std. Deviation			523.482
Minimum			1010.000
Maximum			2549.000

Note. Not all values are available for Nominal Text variables

Frequency Tables

Frequencies for Province

Province	Frequency	Percent	Valid Percent	Cumulative Percent
Nicosia District	180	100.000	100.000	100.000
Missing	0	0.000		
Total	180	100.000		

Note. Postal code has more than 10 distinct values and is omitted.

Frequencies for Municipality

Municipality	Frequency	Percent	Valid Percent	Cumulative Percent
Anthoupoli Settlement	1	0.556	0.556	0.556
Municipality of Agios Dometios	10	5.556	5.556	6.111
Municipality of Aglantzia	15	8.333	8.333	14.444
Municipality of Engomi	15	8.333	8.333	22.778
Municipality of Idalion	5	2.778	2.778	25.556
Municipality of Lakatameia	25	13.889	13.889	39.444
Municipality of Latsia	13	7.222	7.222	46.667
Municipality of Strovolos	49	27.222	27.222	73.889
Nicosia Municipality	47	26.111	26.111	100.000
Missing	0	0.000		
Total	180	100.000		

Descriptive Statistics

Descriptive Statistics

	Buildings Occupied	Buildings Vacant	Building Total	Households	Population	Cypriots	Other Europeans	Non Europeans	0-14	15-64	65+
Valid	180	180	180	180	180	180	180	180	180	180	18
Missing	0	0	0	0	0	0	0	0	0	0	0
Mode	19.000	74.000	913.000	427.000	586.000	16.000	82.000	47.000	195.500	682.000	91.00
Median	486.500	85.500	574.000	505.000	1309.000	1008.500	123.000	101.000	174.500	908.500	159.00
Mean	496.394	103.222	599.617	505.900	1340.533	1061.911	153.233	117.156	199.678	965.194	175.41
Std. Deviation	300.990	91.268	363.366	306.207	832.673	703.440	129.590	84.572	143.726	605.002	133.79
Variance	90594.698	8329.839	132034.886	93762.850	693344.831	494827.981	16793.498	7152.344	20657.259	366027.286	17898.37
Range	2068.000	803.000	2270.000	2135.000	6341.000	5019.000	981.000	434.000	1118.000	4582.000	652.00
Minimum	12.000	0.000	20.000	12.000	31.000	16.000	2.000	0.000	4.000	16.000	2.00
Maximum	2080.000	803.000	2290.000	2147.000	6372.000	5035.000	983.000	434.000	1120.000	4598.000	654.00

* More than one mode exists, only the first is reported

Frequency Tables

Frequencies

Level	Frequency	Percent	Valid Percent	Cumulative Percent
-	-	-	-	-

Note. All variables have more than 10 distinct values

Descriptive Statistics

	Area sqr km	Buildings Vacant	Building Total	Households Population	Mean age	Population density 65+	15+ ratio with university education	Population dependency factor
Valid	31	31	31	31	31	31	31	31
Missing	0	0	0	0	0	0	0	0
Mode	0.027	12.000	71.000	124.000	37.540	18.520	0.130	0.360
Median	0.961	210.000	1346.000	3209.000	38.920	476.940	0.240	0.370
Mean	3.972	457.387	2781.613	6285.645	39.630	618.287	0.224	0.409
Std. Deviation	5.843	501.410	2812.149	6562.258	5.312	570.248	0.104	0.141
Variance	34.143	251412.378	7.908e +6	4.306e +7	28.216	325183.038	0.011	0.020
Range	25.809	1703.000	8742.000	22017.000	24.530	2350.180	0.330	0.800
Minimum	0.027	12.000	71.000	124.000	28.020	18.520	0.040	0.200
Maximum	25.836	1715.000	8813.000	22141.000	52.550	2368.700	0.370	0.800

* More than one mode exists, only the first is reported

Frequency Tables

Frequencies

Level	Frequency	Percent	Valid Percent	Cumulative Percent
-	-	-	-	-

Note. All variables have more than 10 distinct values

Correlation

Pearson's Correlations

Variable		Buildings Vacant	Population density 65+
1. Buildings Vacant	n	—	
	Pearson's r	—	
	p-value	—	
2. Population density 65+	n	31	—
	Pearson's r	-0.270	—
	p-value	0.142	—

r<0
→ negative relation
r²=0.0729<0.01
→ not strong relation
p>0.1
→ not significant

Correlation

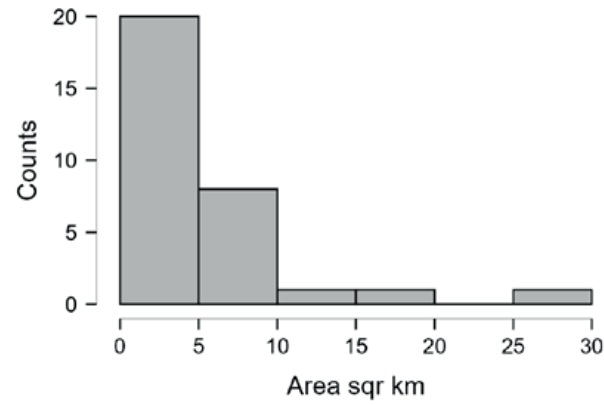
Pearson's Correlations

Variable		15+ ratio with university education	Population density 65+
1. 15+ ratio with university education	Pearson's r	—	
	p-value	—	
2. Population density 65+	Pearson's r	-0.491	—
	p-value	0.005	—

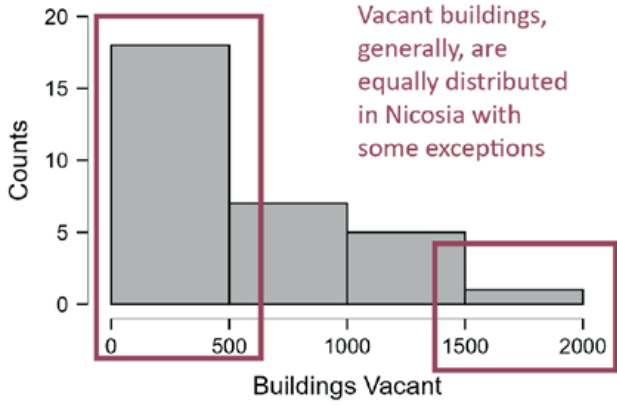
r<0
→ negative relation
r²=0.241>0.01
→ strong relation
p<0.01
→ significant

Distribution Plots

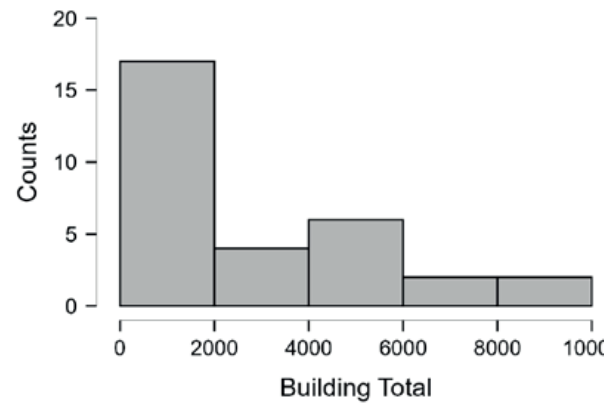
Area sqr km



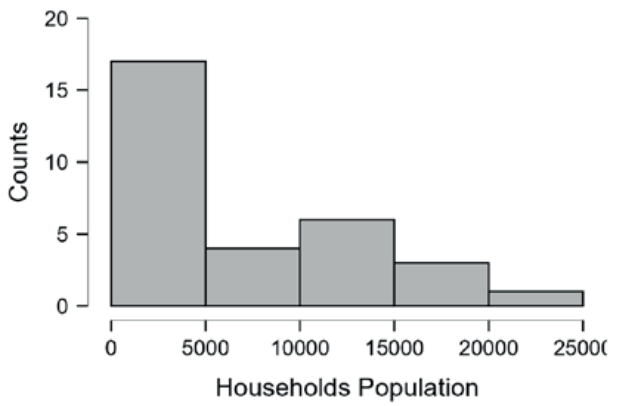
Buildings Vacant



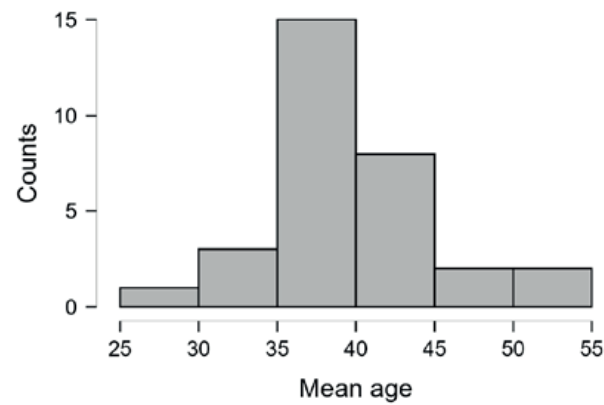
Building Total



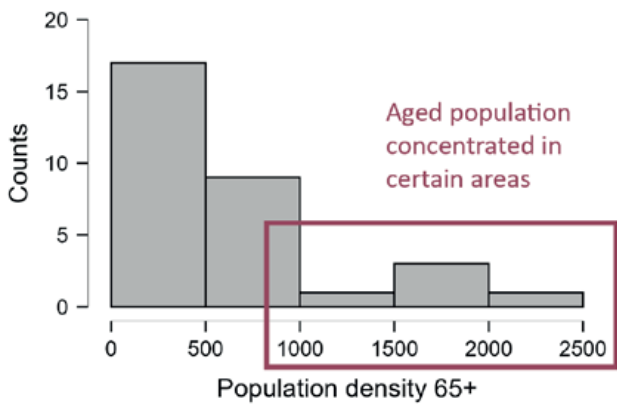
Households Population



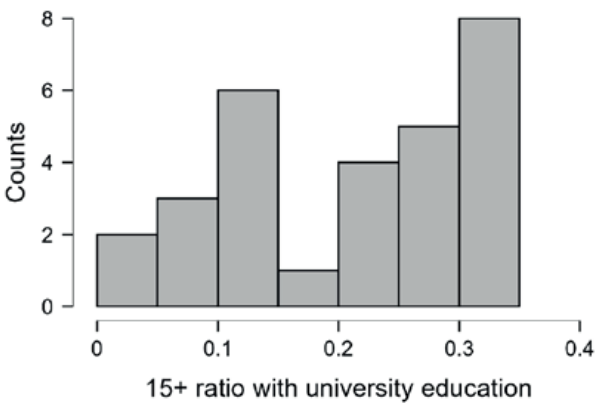
Mean age



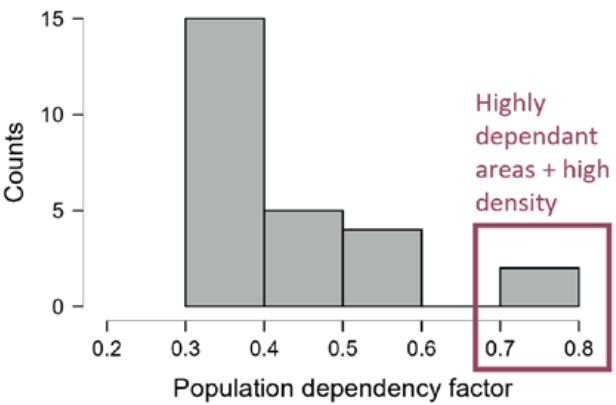
Population density 65+



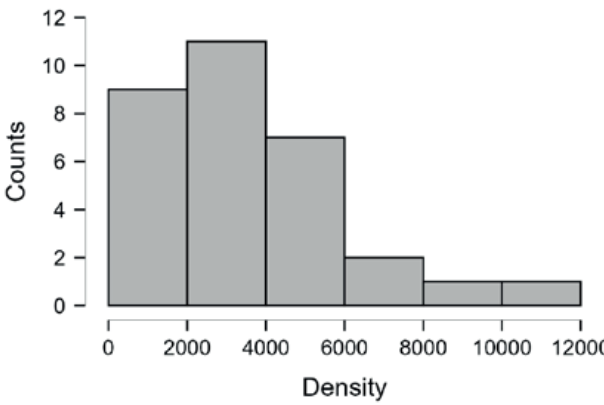
15+ ratio with university education



Population dependency factor



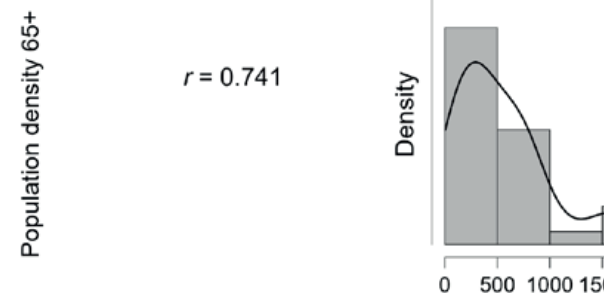
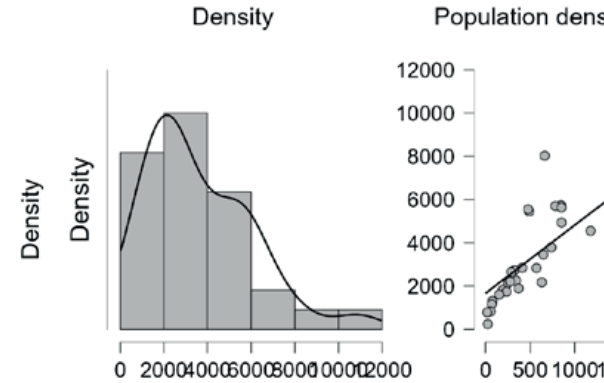
Density



Pearson's Correlations

Variable	Density	Population density 65+
1. Density	Pearson's r	—
	p-value	—
2. Population density 65+	Pearson's r	0.741
	p-value	< .001

$r > 0$
→ positive relation
 $r^2 = 0.549 > 0.01$
→ strong relation
 $p < 0.01$
→ significant



ANOVA

ANOVA - Density

Cases	Sum of Squares	df	Mean Square	F	p
Refugee Settlement	7.393e +6	1	7.393e +6	1.267	0.270
Residuals	1.692e +8	29	5.836e +6		

Note. Type III Sum of Squares

Descriptives

Descriptives - Density

Refugee Settlement	Mean	SD	N
Non Refugee	3378.699	2533.545	25
Refugee	4614.757	1742.731	6

→ Refugee settlements:
Denser built
environment that the
rest urban environment
of Nicosia

ANOVA - Mean age

Cases	Sum of Squares	df	Mean Square	F	p
Refugee Settlement	500.226	1	500.226	41.696	< .001
Residuals	346.249	29	11.940		

Note. Type III Sum of Squares

Descriptives

Descriptives - Mean age

Refugee Settlement	Mean	SD	N
Non Refugee	37.662	3.230	25
Refugee	47.830	4.378	6

→ Refugee settlements:
Older population

ANOVA - Area sqr km

Cases	Sum of Squares	df	Mean Square	F	p
Refugee Settlement	96.700	1	96.700	3.023	0.093
Residuals	927.591	29	31.986		

Note. Type III Sum of Squares

Descriptives

Descriptives - Area sqr km

Refugee Settlement	Mean	SD	N
Non Refugee	4.837	6.217	25
Refugee	0.366	0.130	6

→ Districts created with
refugee settlement cores
have a much smaller area
than other districts

ANOVA

ANOVA - Population dependency factor

Cases	Sum of Squares	df	Mean Square	F	p
Refugee Settlement	0.348	1	0.348	40.982	< .001
Residuals	0.246	29	0.008		

Note. Type III Sum of Squares

Descriptives

Descriptives - Population dependency factor

Refugee Settlement	Mean	SD	N
Non Refugee	0.357	0.080	25
Refugee	0.625	0.137	6

→ Refugee settlements: More dependant
Dependant population =
(population 65+)+(population 0-14)

ANOVA - 15+ ratio with university education

Cases	Sum of Squares	df	Mean Square	F	p
Refugee Settlement	0.127	1	0.127	18.442	< .001
Residuals	0.199	29	0.007		

Note. Type III Sum of Squares

Descriptives

Descriptives - 15+ ratio with university education

Refugee Settlement	Mean	SD	N
Non Refugee	0.255	0.089	25
Refugee	0.093	0.045	6

→ Refugee settlements:
Lower education level

Documentaries of the refugee community

- A. Number of Documentaries: 26
- B. Documentary Source: Cyprus Broadcasting Corporation (CyBC) Archive
- C. People Involved:
- D. Documentaries Period: 1974- 1978, 2019
- E. Documentary themes: Refugee settlements construction process, Community problems and urgencies community activities, refugee handicraft associations, official visits by various international NGOs, associations, parties and state departments
- F. Documentary Goal: Landscape transformation, social transformation, Refugee Community activities, income creation

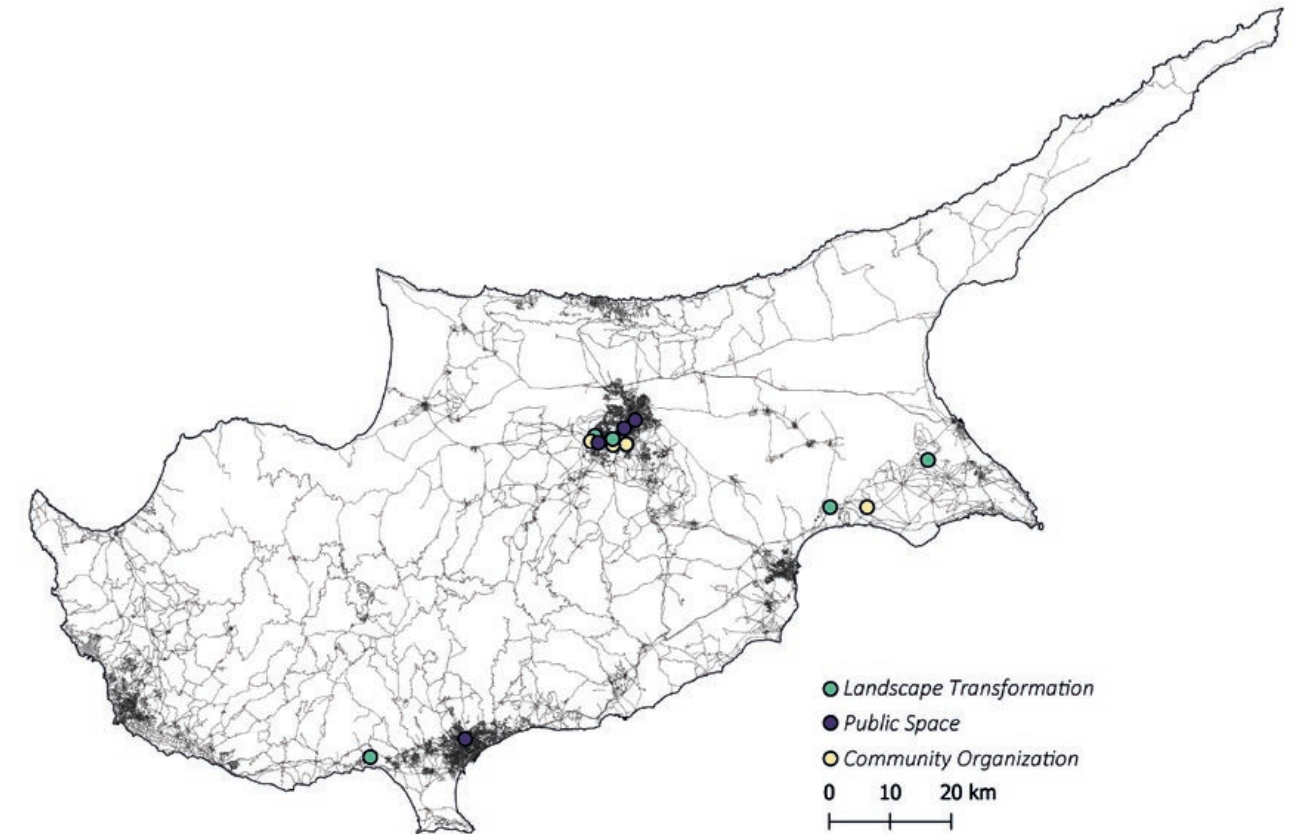
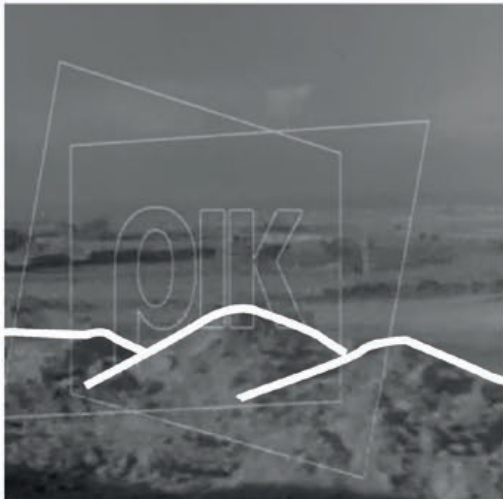


Fig. 88: Over the years, numerous audio-visual materials were created by the Cyprus Broadcasting Corporation (CyBC) on the refugee community, their internal displacement, and the refugee settlements. Source: Images retrieved from Cyprus Broadcasting Corporation (CyBC), <https://www.digital-herodotus.eu/archive/video/items/3805/khronographema-a003-prosphugikoi-sunoikismoil/?page=>

Contents

Abstract Landscape Occupation 1



Landscape transformation



New Landscape



Strovolos 2 Community Housing
Nicosia, 1975



Strovolos 2 Community Housing
Nicosia, 1975

Use



Boundaries



Condition



Fig. 89:

Living Conditions – Temporal

Living Conditions – Phenomenally Temporal



Community Formation

Preoccupation

Occupation Re-Start

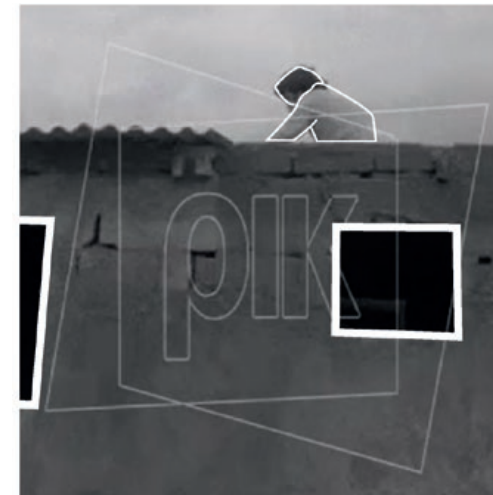
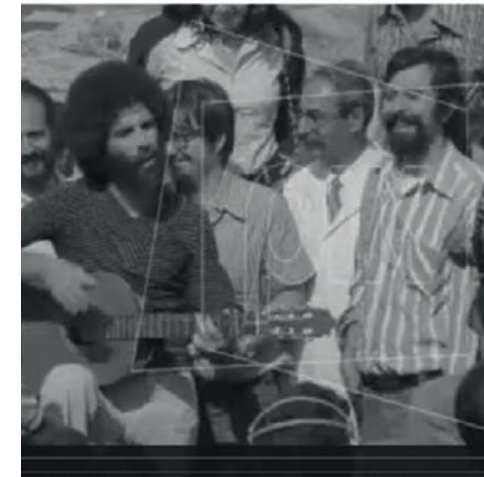


Fig. 90:

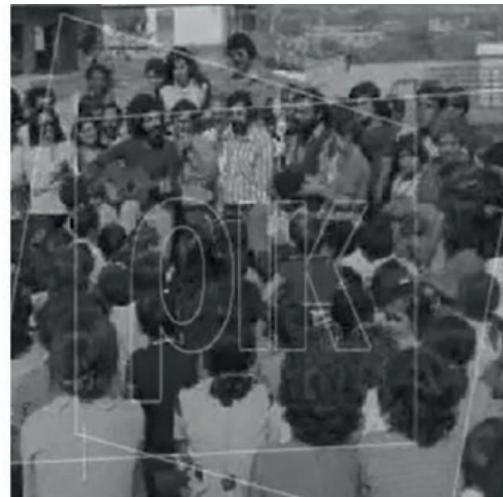


Fig. 91:

