

Investigation on Satisfaction with Caravans Through User Experiences

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ABSTRACT

This Republic of Northern Cyprus. The study focuses on the design and functionality of caravans, evaluating their impact on user satisfaction through graphical analysis. Surveys conducted indicate the presence of eight distinct caravan regions in Northern Cyprus, with six of them deemed suitable for observation. Discussions with municipalities revealed some imposing bans on caravan users in designated areas, contributing to a decline in caravan culture. A survey conducted in the identified six regions assessed the perspectives and satisfaction levels of caravan users. Additionally, map analysis and field studies were integral components of this research. The literature review provides a comprehensive overview of existing research on mobile spaces, user experience, and satisfaction. Data collected from surveys shed light on user satisfaction regarding caravan organization, generating recommendations for caravan designs by posing questions about layout, design, and functionality. In-depth interviews enriched the study by providing a deeper understanding of user experiences and perspectives on caravan organization. The findings of this research will be presented in three main sections: caravan organization, user satisfaction with caravan organization, and recommendations for enhancing user satisfaction through improvements in caravan organization and design. The study offers valuable insights for caravan manufacturers and designers to understand user needs, potentially influence regulations, and improve the functionality and design of caravans.

Keyword: caravan, compact space, mobility, user experience, spatial organization, satisfaction

ÖZ

Bu tez, Kuzey Kıbrıs Türk Cumhuriyeti'nde karavan organizasyonu ile kullanıcı memnuniyeti arasındaki ilişkiyi araştırmayı amaçlamaktadır. Çalışma, karavanların tasarım ve işlevselliği üzerine odaklanmış, bu unsurların kullanıcı memnuniyetine etkisini grafiklerle değerlendirmiştir. Yapılan anketler, Kuzey Kıbrıs Türk Cumhuriyeti'nde 8 farklı karavan bölgesi olduğunu ortaya koymuş ve bu bölgelerin 6 tanesinin gözlemlenmesi için uygun olduğunu belirtmiştir. Belediyelerle yapılan görüşmeler, bazı belediyelerin karavan kullanıcılarını ağırlayan bölgelerde konaklamayı yasaklama kararı aldığını göstermiş, bu da karavan kültürünün gerilemesine neden olmuştur. Belirlenen 6 farklı bölgede yapılan anket çalışması, karavan kullanıcılarının perspektiflerini ve memnuniyet düzeylerini değerlendirmiştir. Harita analizi ve arazi incelemesi de bu çalışmanın önemli adımları arasında yer almıştır. Literatür taraması, mobil alanlar, kullanıcı deneyimi ve memnuniyet konularındaki mevcut araştırmalara genel bir bakış sunmuştur. Yapılan anketler, karavan organizasyonu ile ilgili kullanıcı memnuniyeti hakkında veriler toplamış, düzen, tasarım ve işlevsellikle ilgili sorular sorularak karavan tasarımlarıyla ilgili öneriler sunulmuştur. Ayrıca, derinlemesine yapılan görüşmeler, kullanıcı deneyimleri ve karavan organizasyonu üzerine daha derinlemesine bir anlayış kazanılmasına katkı sağlamıştır. Çalışmanın bulguları üç ana bölümde analiz edilip sunulacaktır: karavan organizasyonu, karavan organizasyonuna yönelik kullanıcı memnuniyeti ve karavan organizasyonunu ve tasarımını geliştirmek için kullanıcı memnuniyetini artırmaya yönelik öneriler. Bu çalışma, karavan üreticileri ve tasarımcıları için kullanıcı ihtiyaçlarına ve beklentilerine daha iyi yanıt verebilmek, belediyelere karavan

konaklamasıyla ilgili referans sağlayabilmek ve karavanların işlevselliğini ve tasarımını iyileştirmek için önemli içgörü ve öneriler sunmayı amaçlamaktadır.

Anahtar Kelimeler: karavan, kompakt alan, hareketlilik, kullanıcı deneyimi, alan organizasyonu, memnuniyet

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Chapter 1

INTRODUCTION

1.1 Background of the Study

Humanity has been constantly migrating throughout history, driven by the need for sustenance, climatic conditions, and shelter. Over time, the need for mobility has evolved into a preference, with advancements in technology and living standards making mobility more accessible. Mobile spaces, such as trains, yachts, and caravans, have become popular due to their ability to fulfill basic needs such as sleeping accommodations, kitchen facilities, and sanitary amenities.

Many individuals lead lives tied to a specific location due to family ties, financial constraints, career commitments, or lack of courage to venture into the unknown. However, they often harbor a desire for freedom and seek to break free from the psychological constraints of their surroundings. The caravan lifestyle can positively impact their satisfaction, as many travelers sustain this way of life independently, earning a living while on the move. Some fortunate individuals have turned their passion for travel into successful careers, leveraging technological advancements and social media platforms to share their experiences through travel blogs, thus solving their financial concerns.

The caravan lifestyle encompasses various applications, depending on the changing conditions of life. The primary motivation for caravan dwellers is to be outdoors, with secondary desires including exploring different cultures, cities, and ways of life,

meeting new people, and engaging in social interactions. The trend towards minimalism, compact living spaces, and a desire for introspective living has become increasingly prevalent in today's society.

Caravans are equipped with heating, lighting, ventilation, and the latest technological systems to enhance the quality of life for caravaners and provide a comfortable living space. In terms of design, caravans are specifically arranged and tailored to accommodate users' preferences, ensuring that travelers feel as though they are in their own homes. This study examines the caravan culture in the Turkish Republic of Northern Cyprus and analyzes the status of caravan culture in Cyprus by addressing user satisfaction among caravaners.

1.2 Problem Statement and Research Questions

As a result of conducted 1, despite the significant importance of the physical effects of the environment from the caravan user's perspective, there have been very few studies relating user's physical environmental factors to their design and psychological impacts. Caravan design has a direct influence on defining living spaces that are essentially large in small areas and providing users with a sense of multifunctional spaciousness. The user's process of defining flexible space, desire for living, emotional well-being, and a sense of security are influenced by general tangible characteristics. The interaction between space organization and the user is also modified by various aspects of living space design.

Through formal interviews with municipalities in the Turkish Republic of Northern Cyprus, and analyses conducted with caravan dwellers in designated caravan parks, it has been concluded that in the design of caravan spaces, consideration of not only the

physical environment but also physical environmental factors is essential for achieving an advantageous living environment in alignment with mental resources. The user's perception of living space and the examination of flexibility in the lifespan of caravans, as mobile spaces, emerged as a priority that needs to be addressed. Main problem question is;

- How physical environmental factors affect caravan users?

Finding the answer of user satisfaction related to the questions of;

- Why is living in a caravan preferred over a home?
- How can caravans provide a sense of home in mobile environments?
- How can users create different functions in their caravans through various organizations?
- What is the environmental impact of caravan users in their accommodation areas?

They are most important question for caravan user and organization.

1.3 Aim and Objectives

The purpose of this research is to examine the living standard, trend and interaction in the Caravan space, taking into account user expectations in terms of user and space satisfaction in order to ensure belonging in this new living space.

It is aimed to reveal the factors affecting the caravan design and process, and to evaluate the environmental, architectural and interior design approaches developed by evaluating the approaches to the concept of "caravan" that emerged as a result of the process analysis. It is aimed to investigate the evolution of houses towards caravans in

line with user needs and the response of this evolution on the scale of the interior space, equipment and close environment of the caravans. In caravan research, the relationship between open, semi-open and closed spaces in the parking areas where they stay and user satisfaction will be discussed.

1.4 Research Methodology

This research will be conducted with mixed research method approach through sequential As a result of conducted research, despite the significant importance of the physical effects of the environment from the caravan user's perspective, there have been very few studies relating user's physical environmental factors to their design and psychological impacts. Caravan design has a direct influence on defining living spaces that are essentially large in small areas and providing users with a sense of multifunctional spaciousness. The user's process of defining flexible space, desire for living, emotional well-being, and a sense of security are influenced by general tangible characteristics. The interaction between space organization and the user is also modified by various aspects of living space design.

As a result of formal interview conducted with municipalities in the Turkish Republic of Northern Cyprus, data pertaining to the existence of seven different caravan areas was obtained. A site analysis was conducted by visiting these seven different areas, and through observations of the settlements of caravan users in the park areas, survey questions related to the research were determined. The site analysis results and observations of caravan dwellers in their respective park areas led to the conclusion that in the design of caravan areas, it is crucial to consider not only the physical environment but also the factors related to the physical environment. This is essential

for achieving a living environment that is harmonious with mental resources and advantageous. The user's perception of living space and the examination of flexibility in the lifespan of caravans, being mobile spaces, emerged as a priority that should be addressed in three main stages.

The first phase will include integrative literature review to summarize the main themes of the research at the beginning to frame the problem. Integrative literature review will focus on the key concepts/main themes of the thesis which are factors of the physical environment, space satisfaction, space organization and expectation of space from user point of view. The second phase will be conducted with interview via open ended questions with a pilot group for exploratory purposes in order to explore the topic with the caravan user at the site at a specific case study (North Cyprus-Famagusta). The pilot group will be consisted of a group of user from a caravan park at the Silver Beach in Famagusta through open-ended questions. The third phase will be followed with a quantitative research method by questionnaire survey to generalize results to a population by collecting data from a large number of people. The survey will be conducted on a larger groups of users in North Cyprus at different age and different life standarts. The rationale for using both qualitative and quantitative data was that a useful survey of user experience could best be developed only after a preliminary exploration of user point of view.

1.5 Limitation

This study is limited to the investigation of the relationship between physical environmental factors of mobile spaces and caravan user's adaptation of new living space and attentiveness at 'physical settings' of two different caravan groups that are

Long Term and Short Term caravan user. Research will be conducted through a case study that is limited to North Cyprus Caravan. The survey phase will be conducted through a random sampling of the users of both standart (caravan and users). Age, gender, nationality, language, and the preferred type of the mobile space will not be considered as a limitation during this study.

1.6 Structure of the Thesis

The thesis consists of five chapters, each focusing on different data collection, methodology, and analysis approaches. The first chapter introduces the topic, outlines the problem statement, case study location, and research question. The second chapter reviews mobile spaces, examining their physical, functional, social, and perceptual features. The third chapter discusses the philosophical aspects of caravans, their historical evolution, current effects on users, and historical significance. The fourth chapter presents the case study, presenting data collection methods such as questionnaires, surveys, and observation. The chapter then analyzes the internal, semi-open, and open space organization of caravans, focusing on user satisfaction. The chapter concludes with a summary of the organization and user satisfaction in caravan areas. The final chapter summarizes the full investigation, analysis-based study results, and suggestions for enhancing caravan conditions and user happiness in the Turkish Republic of Northern Cyprus. Overall, the thesis provides a comprehensive understanding of the various approaches to data collection, methodology, and analysis in the field of mobile spaces.

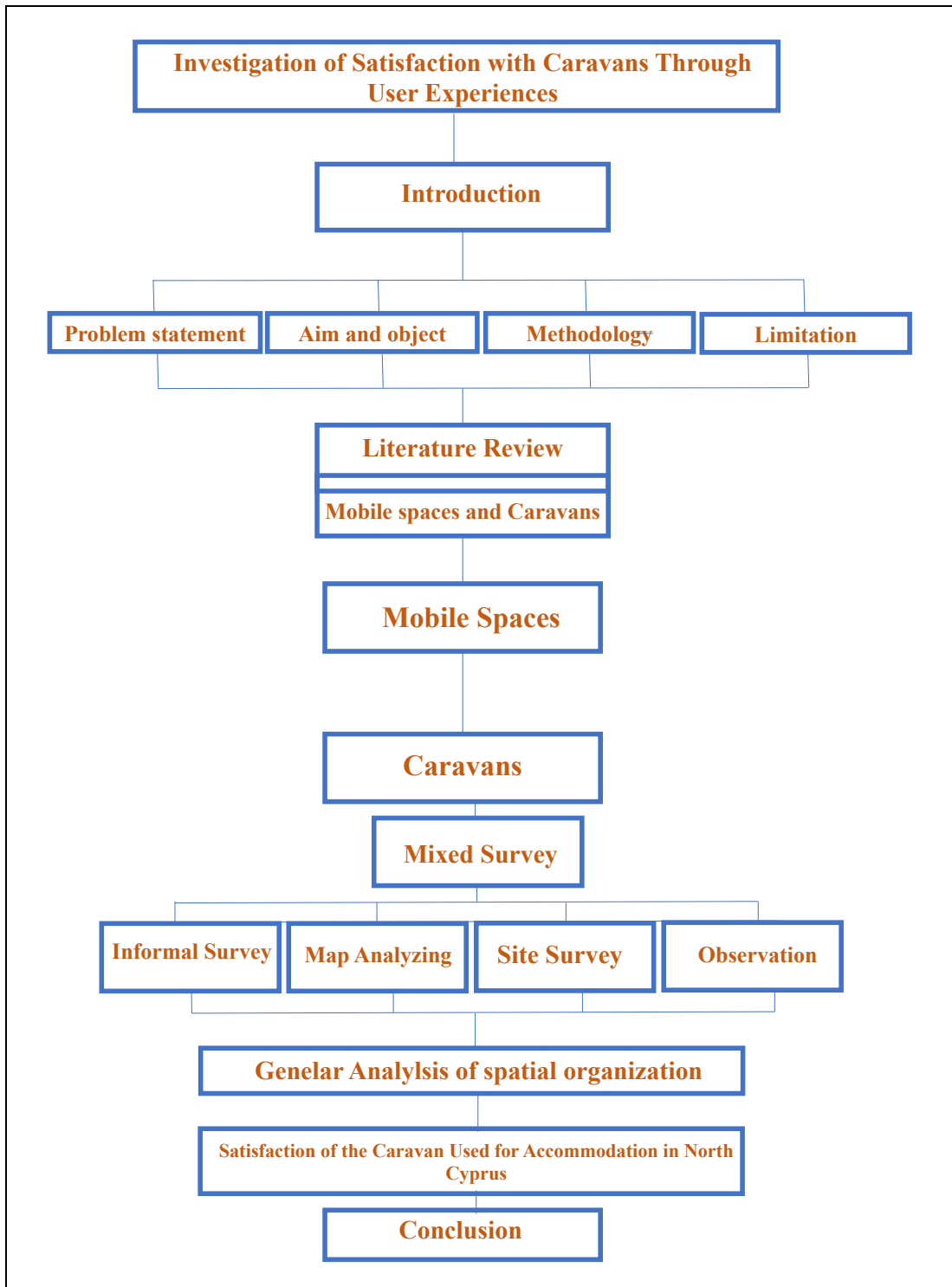


Figure 1. Thesis structure

Chapter 2

LITERATURE STUDY

In this section, the origins of nomadic living resulting from the convergence of human mobility and the inclination to live together will be examined. However, it is evident that various user profiles share a common need, namely, the need for a place where they can reside during their travels (Altan, 2007). This section consists of eight subheadings: Mobile Space Life Concept, 'Types of Mobile Space, Mobile Space Development, Mobile Space Indoor Organization. These headings have been further divided into subheadings based on research, and a literature review has been conducted.

2.1 Mobile Space Life Concept

Movement, often seen as a phenomenal form, is closely related to time and space. Our basic conception of time and space involves continuous, interconnected movement. Space, a three-dimensional, functional form with dimensions like width, length, and depth, can grow or shrink depending on the user, mass, and purpose of use. People are functional and designed for spaces, ensuring they can function effectively and live comfortably in a given environment. (Altan, 2007). Mobility is transforming living spaces and architectural designs, with kinetic mobility becoming a fundamental component. Architecture is constantly evolving, and mobile architecture focuses on flexible, democratic, and free spaces. This approach addresses issues like immigration, refugees, and homelessness. Mobile spaces are designed to be portable, lightweight,

and easily disassembled. As technology, living conditions, and materials evolve, mobility in architecture allows for the construction of dynamic architectural products. (Hacalibeyolu, 2005). Modern technology has enabled us to improve mobility by using lightweight materials and well-developed mechanisms.



Figure 2. Mobile space example homeless vehicle (URL 1)

The Word mobile has 3 principles

- Portability
- Convertibility
- Flexibility.

The principle of portability in mobile spaces refers to the ability of structures to be transported as whole or in parts, enabling functional transformations and material use. This principle is particularly relevant in light and robust components, promoting

mobility and adaptability in mobile architecture design. This principle has gained significant interest in recent years.

Mobile space is a concept that meets the characteristics of both being mobile and being a space and can be associated with many different concepts in this context. The understanding of mobile space is the feature that makes people's feelings, history, and culture of space important rather than the permanence of the space (Akgül, 2006). Mobile spaces, designed for constant mobility and survival, have gained popularity due to the fast-life factor and desire for mobility. These non-permanent structures, such as caravans, prefabricated houses, modular houses, and disaster houses, offer a sense of belonging and freedom of movement. They can be easily expanded or contracted, and are easy to install. Yachts, used as watercraft housing, are also mobile spaces. The increasing popularity of mobile spaces underscores the importance of adapting to modern lifestyles.

Mobile Space on 3 headings;

- Portable mobile space
- Demountable Mobile Space
- Relocatable Mobile Space.

Portable mobile spaces are lightweight, robust structures that can be moved, accessed, or modified using an external wheeled system. Demountable spaces are self-propelled, lightweight, and require skilled workers for assembly and disassembly. Relocatable

spaces are modular systems that can be easily transported and assembled at the construction site, offering flexibility for different plan types (Tuncel, 2007).

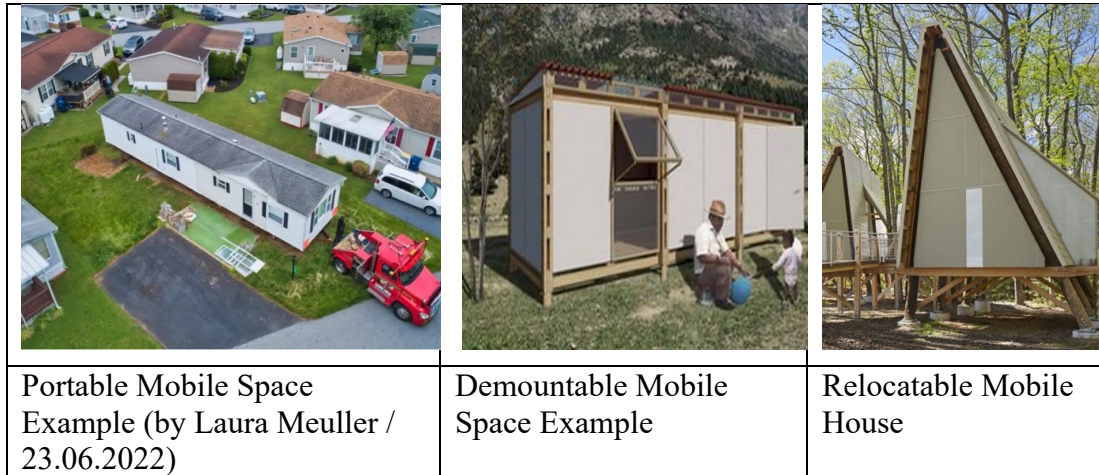


Figure 3. Portable, demountable and relocatable mobile spaces (URL 2)

2.2 History of the Mobile Spaces

Different people have different understandings of life space, which must be based on social, cultural, and economic values. The fundamental necessity is to build a place where people can protect themselves, maintain privacy, and feel safe and comfortable. Comfort is the basis for building a settlement, and the quality of equipment used to meet human needs is crucial. The environment's temperature, light, oxygen, humidity, and pressure ratios also play a role in creating comfortable conditions. (Kahya, 1993). This thesis analyzes the evolution of space over time, focusing on the social, cultural, and technological impacts of human mobility and nomadism. It highlights the impact of human mobility on shelter and life space culture, highlighting the early days of cave living and the evolution of nomadic living through tent design.

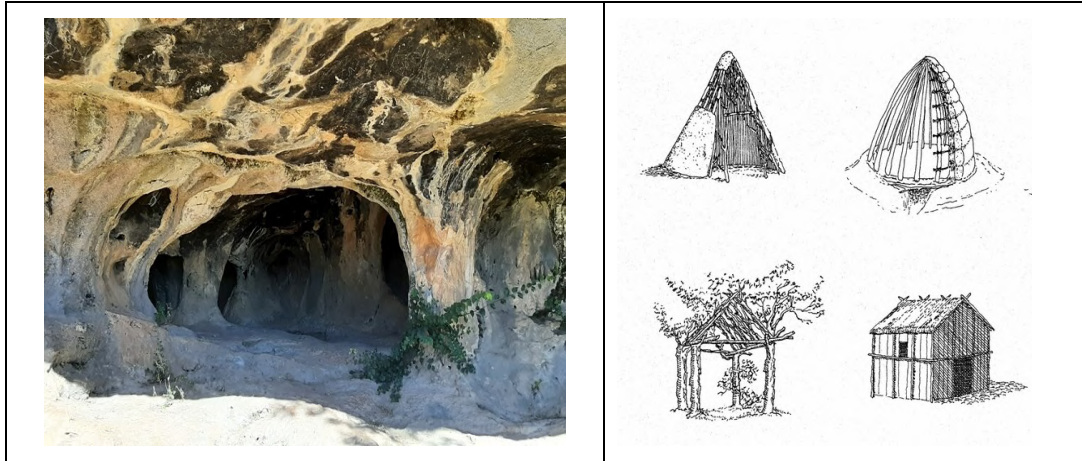


Figure 4. Change of spaces after transition to settled life

Mobile space emerged from the need for belonging and comfort in nomadic societies, which relied on hunting, gathering, and shepherding for resources. The concept of mobile life and mobile space originated from the tent, which has influenced people's lives by providing shelter and light, flexible items. The tent phenomenon has evolved over time, incorporating elements of mobility and privacy, making it a worldwide symbol of shelter that transcends cultural boundaries. (Tuncel, 2007). After the industrial revolution, with the transition from rural areas to urban settlements, the needs of the users have changed, all family members have started to work, and families have shrunk as communities sharing the same houses, the insufficiency of the capacities of the cities started, the housing areas have been reduced, and the volumes have been reduced. Modernism was influenced by different worldviews and trends, and by making use of different materials, users gained freedom of movement and started to use caravan-type mobile vehicles for travel or holiday purposes according to their own luxury lives. Unfortunately, some users who are financially incapable have also turned to using negative caravan parks full-time.



Figure 5. Positive mobile space area (URL 3) & Negative mobile space area in Ohrid
(Photo Taken by Author, 2023)

Mobile space design is a dynamic and evolving field, influenced by advancements in technology, industry, and science. With autonomous cars and robots replacing human labor, the possibilities for creating mobile spaces are endless, allowing for the creation of various forms, structures, and lifestyles.

2.3 Recent History of Mobile Spaces

Modern architecture is shaped by the rapid technological advancements and the interaction between technology and architecture. The 19th-century intellectual infrastructure, later modernism, was influenced by the "machine world" and the 19th-century intellectual infrastructure. Modern architecture emphasizes temporary buildings and the use of machines for inspiration and opportunities (Akgül, 2006). Different architects, designers, and manufacturers have worked on the reflections of the phenomenon of mechanization introduced into human life by the Industrial Age on architecture and the understanding of moving structures during this parallel time period sparked by the concepts of movement and speed (Akgül, 2006). The result of

fusing these ideas with boat and airplane construction techniques is the ‘Dymaxion House’ which was patented in 1928 and built for the World Fair in 1933. The building is lightweight enough to be moved about by helicopter. Cities, despite their diversity, maintain a dynamic structure and lively environment, dominated by microelectronic and computer technologies. As society transitions from an industrial to an information society, urban mobility creates irregularities within and new orders within cities. Since the 1920s, caravans have been a part of daily life due to the construction of Ford factories and mass production. Different designs were created to make short distances comfortable, including living quarters, caravans. Glenn Curtiss created the ‘Earl Travel’ caravan in 1927, the earliest tent-free travel caravan. He also developed the ‘Aerocar Land Yacht’ caravan, designed for comfortable travel on interstate routes using aviation construction principles. Fuller created the ‘Mechanical Wing’ caravan in 1940 for military personnel and industrial workers as shelter (Davidson, 1973).



Figure 6. Aerocar Land Yacht (URL 4)

Americans became aware of the post-industrial revolution's machinery's ability to give them greater mobility and enable interstate travel with the information age. In 1921,

manufacturers commercially manufactured the first tent caravan by attaching a small two-wheeled metal caravan chassis to a retractable canvas tent.



Figure 7. 1925 Chevrolet house car (URL 5)

The Chevrolet House is a 1925 mobile home caravan designed for housing needs during World War-II. Launched to address housing issues, it was built on to minimize overconstruction. Post-war, mobile spaces returned, and after the war, demand met supply. Caravans were used for offices, school hostels, libraries, and traveling exhibits. (Davidson, 1973).

2.4 Types of Mobile Spaces

This section discusses mobile spaces, including permanent life, plain, trains, and caravans. Mobile spaces are used in trade, industry, education, health, housing, and military domains. They offer flexible shelter options, are easy to transport, install, and dismantle, and are made from versatile materials. Furniture should be moveable and spatially focused, and construction and assembly errors minimized for fast, inexpensive, and reliable production (Tuncel, 2007);

- I. Mobile space for permanent living (Tiny house)
- II. Plain mobile space

- III. Floating mobile space
- IV. Caravan mobile space.

The Tiny House is a compact residential structure, that is intentionally built to embody a minimalist ideology and emphasize the concept of simplicity. It is frequently selected by individuals who desire to live in symbiosis with the natural environment. The Tiny House is distinguished by its compact size, practicality, and lack of superfluous areas. The objective of Tiny House living is to furnish the essential comfort, technology, and aesthetics for year-round contentment while also providing a modest yet luxurious existence at substantially reduced expenses. The concept of Tiny House is regarded as a lifestyle (Anson, 2014).

Airplanes, despite their basic interior design, have grown in size and sophistication, necessitating standardization and constraints for safety. Designers must manage interior elements like wall cuts, carpets, colors, chair covers, cutlery, and graphic elements (Hughes-Stanton, 1967) Floating mobile space houses, powered by nature and designed to move in sync with its motions, are a high-tech solution for addressing global warming. These smart dwellings use solar power, air-source heat pumps, and rainwater collection to generate energy and heat. (Balkan, 2004).

One of movable housing is train mobile spaces. Trains are vehicles that allow people to travel large distances on land. Pullman was the first to conceptualize trains as mobile spaces on wheels. Private compartments, dining rooms, smoking rooms, and drawing rooms were among Pullman's early sketches. Luxury and opulence were reserved for

first-class passengers, with no regard for second- and third-class passengers (Hughes-Stanton, 1967). The trains initial design stressed their ‘vehicle’ nature, with the conversion of trains into homelike living facilities with waiting rooms, bedrooms, baths, dressing rooms, telegraph offices, bars, and restaurants a secondary priority. One of movable housing is caravan mobile spaces. The history of caravan and the concept of ‘mobile construction’ stretches back to the early twentieth century. The early evolution of caravans is a process in which the idea of mobile construction evolves in tandem with the development of automobiles. These transportable cars, which provided people with enormous flexibility in mobility, were popular, particularly in America. European gypsies built caravans, a type of mobile space, in the 1500s. European gypsies created a portable space by pulling horse-drawn carriages with one or more horses, marking the first step in the beginning of the caravan culture. In 1870, American designers created the first official caravan design, adding attachments to enhance mobility by placing them on the sleds. This transformation has been a spark for caravans to be used as mobile living spaces (Akgül, 2006).



Figure 8. 1870 The first example of a Caravan transported by horse

When appropriate systems and clean water installations are connected, caravans become self-sufficient living spaces that can meet the needs of their users. They are self-contained and built on a chassis with a direct motor and gear system. ‘Caravans’ are self-propelled portable dwellings (Davidson, 1973). Caravans are more maintainable, innovative, mobile, and have the necessary equipment designs. Caravans have a miniature infrastructure like doll houses. They give the user a feeling of intimacy, warmth, comfort, and freedom (Smithson & Smithson, 1970).



Figure 9. Mercedes-Benz motorcaravan example

Caravans are modern designs that can move as a whole and contain the necessary equipment that may be required, compared to fixed living spaces. Caravans do not have interior circulation and do not have a certain design requirement. Caravans have a single function, and the feelings that caravans give to the user are intimacy, warmth, comfort, and freedom (Smithson & Smithson, 1970). Caravan culture values freedom and connection to nature, with open, semi-open, and closed spaces. Environmentally friendly, using solar energy, rainwater collection, recycling, and compost toilets, they can survive without city networks (Çelikbilek, 2019). Caravans are designed to

accommodate various activities and can be positioned in various environments like forests, mountains, and coastal areas, ensuring a relationship with nature and minimizing impact in cold and hot weather (Tetlow, 1999).

2.5 Mobile Space Development

This section explores mobile space usage factors, including user identity, displacement, economic, psychological, environmental, and technological effects, and their impact on the 20th century's mobile home architecture, highlighting the growth of mobile homes and their evolution in architecture.

The industrial revolution transformed housing design and family structures, enhancing urbanization and economic prosperity. Post-World War-II, single homes and mobile premises increased, with no exact numerical data. The research indicates that the increase in the number of people in a country and the psychologically positive results of changing and dissolving family structures in mobile spaces designed for families living alone and without children. (Hamilton, 2004). Housing design has evolved post-war due to the rise of young people, women in the workforce, and active women's participation. As families increase, space design changes demographically, leading to the popularity of mobile space designs, such as home offices, which extend comfortable workspaces.



Figure 10. An example of Studio106 (URL 6)

The psychological effects of users on different modes of transport, particularly walking, can create emotional meaning in mobile spaces. Walking conveys a sense of liberation, while vehicles, ships, and trains offer faster and shorter journeys, but their strict timetables reduce the sense of liberty to one dimension. (Hughes-Stanton, 1967). Transport advancements have enabled individuals to escape crises, often due to natural disasters and wars. Fear of losing access to their living areas leads to immediate shelter issues. Temporary shelters like tents and temporary shelter processes can help alleviate this psychological impact, ensuring access to permanent housing until permanent housing is built. (Onur, 2000). When we consider the ecological and environmental effect of mobile space development factors towards the end of the 20th century, it became evident that the planet's finite resources were being depleted rapidly, and that the Earth was being harmed by the production of dirty energy resources as well as changing lifestyles. It has been observed that resources are being depleted quickly and that the Earth is being harmed by the production of dirty energy resources as well as changing lifestyles. 21st-century technological advancements have transformed living

spaces, enhancing user-friendly functionality and accessibility to any location through mobile space systems and advanced interface designs (Guallart, 2005).

2.6 Mobile Space Indoor Organization

In this section, the interior organisation of mobile spaces is evaluated. As Interior Space and Environmental Relations, like caravans, offer compact living spaces with limited flexibility, but alternative solutions like short-term or full-time housing have emerged to cater to minimalist living needs.



Figure 11. An example of a mobile space designed for accommodation of maximum number of people (Ari, 2019)

Designing mobile vehicles for caravan parks or campsites prioritizes essential amenities like sleeping quarters, living space, and basic cooking facilities, considering structural, environmental, technical, psychological, aesthetic, and physical requirements, as well as factors like lighting, acoustics, and air organization (Kaya, 2010). Mobile spaces require interior design that meets user's basic and personal desires, utilizing daylight and eco-friendly features like solar energy panels and

rainwater collection. They offer flexibility, portability, and changeability, ensuring maximum functionality in minimal space (Smithson & Smithson, 1970).

Anthropometry in interior design is a fundamental approach that considers human body measurements and ratios to create spaces that foster connection between individuals and their surroundings (Ching, 2011). Dynamic anthropometry takes into account functional measurements, recognizing that humans are capable of swift movements (Arslan, 2006). The industry's rapid growth poses challenges like occupational accidents and diseases, necessitating ergonomic standards and monitoring of caravan design and production standards in Turkey (Arı, 2019).

Weil am Rhein designed the 'Diogene' cabin in 2012. Diogene is a simple living shelter prototype developed to satisfy the housing demands of temporary and seasonal workers in developing countries. Living in a minimal shelter is regarded as a personal choice in this context (Figure 12).

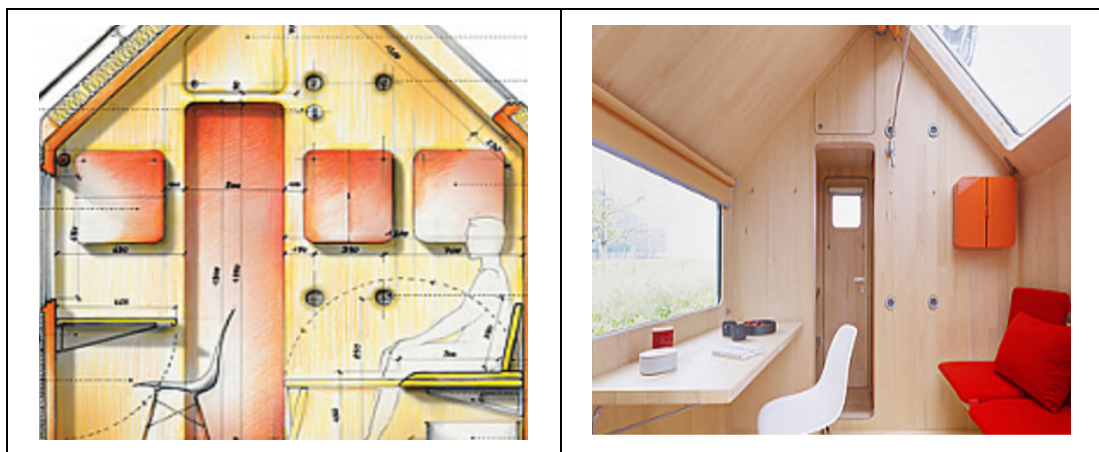


Figure 12. Diogene mobile house human scale and interior detail (URL 7)

Physical requirements consider factors like user population, environment attributes, equipment coverage, dimensions, and spatial characteristics. Designing universally appealing designs for large workforces is challenging, but considering user characteristics and body measurements simplifies decisions for limited populations (Aluçlu, 2000).

According to İnce (2006), it offers significant convenience in the process of design. When analyzing the physical user requirements that influence the mobile space, it is possible to categorize them into four distinct classes;

1. Dimensional Requirements: This pertains to the static, dynamic, and anthropometric dimensions, as well as the actions and behaviors of employees inside a given space.
2. Thermal Considerations: Optimal conditions pertaining to temperature, humidity, radiation, and air circulation within the given environment
3. Auditory Requirements: The auditory requirements encompass the necessary sound intensity within the designated area, the even distribution of sound reflections, and the acoustic qualities of the space.
4. Visual Requirements: The space should have suitable light intensity and illumination levels.

Living space in mobile habitats like caravans is personalized and flexible, influenced by technological advancements. Eduard Böthlingk's 'Mobil Camping' showcases adaptability in caravan architecture, allowing for various activities like hosting guests, cooking, sleeping, working, and washing. (Doğan, 2008).

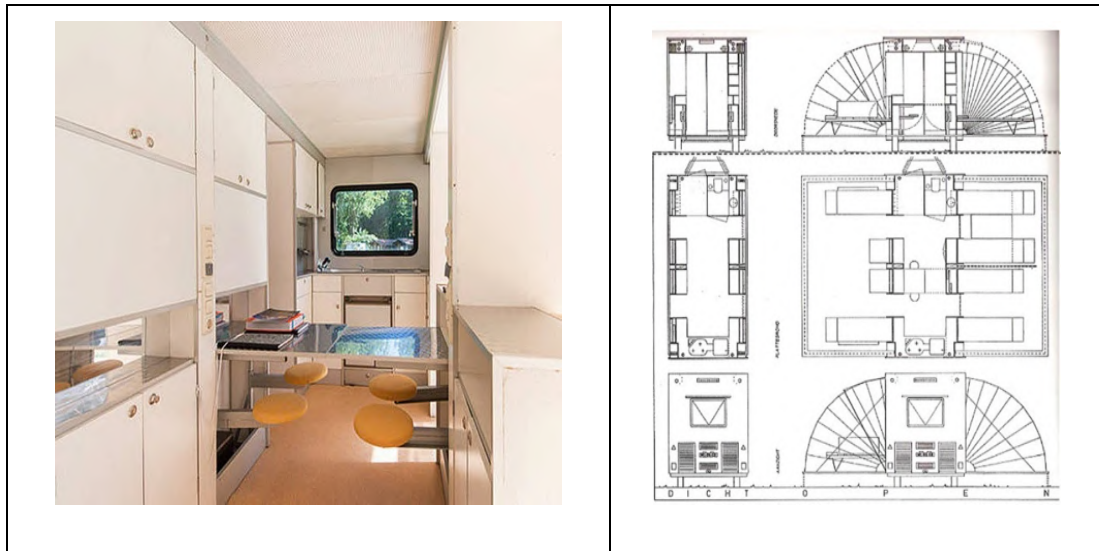


Figure 13. Mobil Camping interior organization and drawings by Eduard Böhlingk (URL 8)

2.8 Chapter Conclusion

This chapter examines the emergence of the concept of habitat, which arose from the need to protect themselves from climate change and to engage in hunting activities in a period characterized by nomadic lifestyles before humans settled down. Individuals from many backgrounds transitioned into migrant communities in search of suitable living spaces and sought to provide long-term living spaces. When evaluating these space designs, we also consider the evolution of the historical context, with a particular focus on mobile-space features.

The beginning and historical development of the concept of mobile space are mostly explained through historical examples. The definition starts with the concept of space and then analyzes the development of mobile space. The natural state of human existence, characterized by freedom, has been jeopardized over time. The emergence of the tent structure, which initially gave rise to the concept of mobile space, is based on the erosion of freedom. Later, in the Neolithic period, this concept transformed into

settled structures and further contributed to the loss of human freedom (Gürsel, 2005). During the Industrial Revolution, a philosophical divergence emerged within mobile spaces, which later catalyzed transformative processes and advances. During the Industrial Age, the emergence of human-powered ships, trains, vehicles, and airplanes facilitated the widespread mobility of mobile spaces and led to their extensive expansion. This chapter concludes by presenting examples that support the inter-period changes in mobile spaces, as well as the causes that influenced these changes and the subsequent impacts on the structure of the mobile space.

Chapter 3

CARAVANS IN THE BACKGROUND OF PHILOSOPHICAL PERSPECTIVE

In this section, caravans and philosophical perspectives are mentioned in the background. As history of caravan, general definitions about caravans, types of caravans, caravans usage and purpose of the use, the locations of the caravans, design process and interior organization in caravans, spatial organization of caravans for accommodation, and legal situation of caravans in the World are examined. In this part of the research, starting from the history of caravan, the laws of caravans around the world have been finalized.

3.1 History of Caravan

Caravans are covered vehicles that serve as both a vehicle and a living space, dating back centuries. Originating in the early 20th century, caravans evolved alongside vehicle development. European gypsies used horse-drawn carriages in the 1500s, circus owner Antoine Franconi requested the construction of the first caravan in 1830, and American designers added skids and attachments in 1870. The industrial revolution led to compact mobile homes (Smithson & Smithson, 1970). Grosvenor Caravans, founded 1919, was the first global caravan manufacturer. Sir Samuel White Baker owned the first caravan in 1878, and Prince Oldenburg used it for tourist trips in 1897 (Ötügen, 2010). In the 1950s and 1960s, ‘mobile structures’ and ‘caravans’

differentiated. The industrial revolution and technological advancements have revolutionized engine production, creating mobile habitats like caravans for entertainment, camping, and accommodation, and sparked interest in using caravans as temporary habitats (Figure 14).

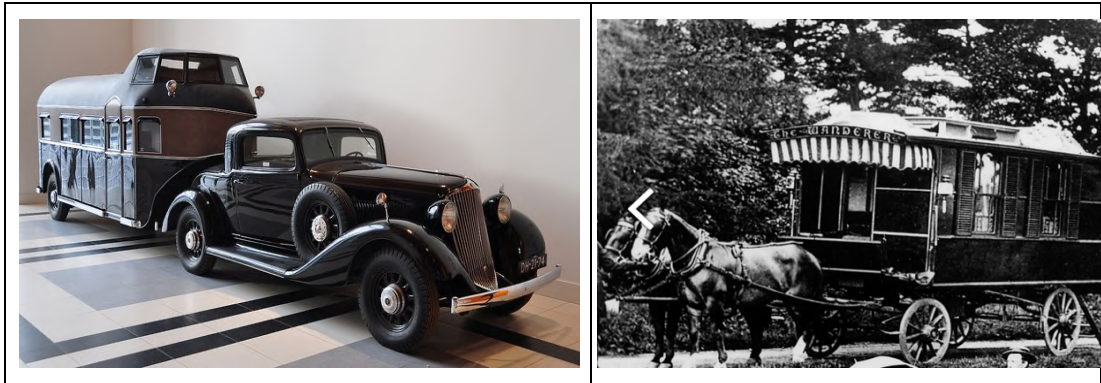
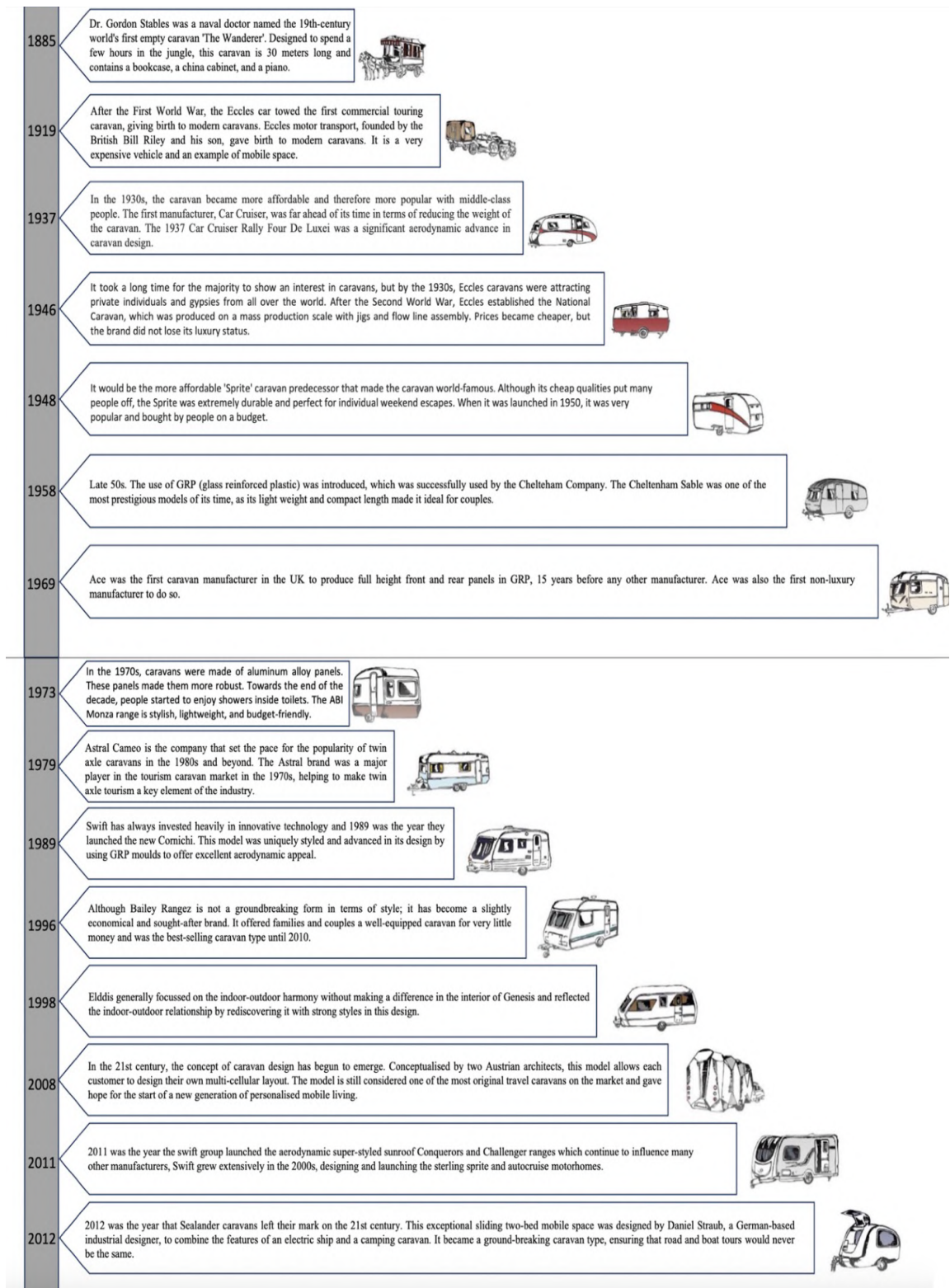


Figure 14. Aerocar Land Yacht in Luwman Museum (URL 9) and The first habitable caravan (URL 10)

Table 1. The evolution and transformation process of the mobile living phenomenon (Ari, 2019)



3.2 General Definitions about Caravans

The demand for a practical and comfortable living space for those who want to travel or take vacations gave rise to the portable house category known as caravans. A ‘moto caravan’ is a product built directly on a vehicle's chassis with its own engine and transmission system, allowing it to move without the use of another car. On the other hand, a ‘towable caravan’ is a product that can be attached to a car and transported with the aid of an automobile (Davidson, 1973).



Figure 15. Towable caravan and motocaravan example

Caravans are modern, mobile designs that provide warmth, comfort, independence, and personal contact. Originally designed for basic needs, they have evolved into opulent living areas. They can be towed by vehicles and converted into self-sufficient living areas when connected to clean water facilities (Smithson & Smithson, 1970).



Figure 16. Interior space in caravan (URL 11)

Caravans are gaining popularity due to their convenience and freedom of travel, with manufacturing and consumption expanding rapidly. They have become more widespread internationally due to their rapid growth in volume, technology, and participation.

3.3 Types of Caravans

This section explores different types of caravans, including towed and motor caravans. Caravans are portable buildings with various uses, easy cleaning, low maintenance, and flexible interior and exterior spaces, unlike conventional housing (Akgül, 2006). Assessing caravans, which are growing more and more appealing every day, just from the standpoint of tourism provides a sterile viewpoint.

Caravan types are generally divided into two. These are also diversified within themselves.

- Motocaravans
- Towable caravan

3.3.1 Motocaravans

Self-propelled camping vehicles designed for autonomous movement and equipped for camping purposes appears to be what the phrase you provided describes. These motorhomes are able to be fitted as a single unit within bus bodies, inside enclosed panel vans, behind vehicles, and inside specially designed compartments. As mentioned in Section 3.2, a ‘motor caravan’ is a product built directly on the chassis of a vehicle, with its own engine and transmission system, allowing it to move without using another vehicle (Davidson, 1973). Motocaravans are in two types as campervan and alcove caravan.

3.3.1.1 Campervans

Camper caravans are compact, lightweight vehicles with internal bedrooms, kitchens, and bathrooms, ideal for outdoor use. They are lightweight commercial vehicles with minor modifications, making them quick and ergonomically designed. Ideal for frequent location changes, they can be parked anywhere, making them an excellent option during the coronavirus epidemic.

3.3.1.2 Alcove Caravans

The Alcove caravan, also known as a motorhome, is a spacious and spacious caravan suitable for larger families. It features an insulated area and an elevated upper section, with an alcove portion on the roof of the driver's seat. It can be living place with various models making it an appealing choice for large families.

3.3.2 Towable Caravans

In Section 42 and Section 52 of the Road Traffic Regulations, caravans can be of two types: light mini caravans and heavy off-road, five-wheeled caravans, commercial caravans, and luxury caravans. When towing a light mini caravan, the equipment

(furniture, cooker, bed, table, toilet, etc.) should not weigh more than the specified amount. Additional extras such as larger cabinets, cookers, washing machines, etc. can be added to off-road, five-wheeled caravans, commercial caravans, and luxury towing caravans specified as heavy, and these caravan types can have two axles and more length according to the Road Traffic Regulation in Article 42 and Article 54.

3.3.2.1 Mini Caravans

Mini caravans typically have only one function, and the size of their interiors varies depending on the kind and design. Depending on how they are configured inside, they can accommodate two to six people for sleeping. Typically, there is a kitchen section with a sink, stove, work surfaces, and other needs, and a toilet with a toilet, sink, and shower. With Mini Caravans, however, this is not the case. Their names also vary based on their color and form. (Timeless, 2022) Mini caravans, often known as mini caravans, are typically made to fit one or two people. They may be conveniently mounted to users vehicles and make traveling easier for them because of their lightweight construction.

3.3.2.1.1 Teardrop Caravans

As the name suggests, a teardrop trail, also known as a teardrop camper caravan, is a lightweight, aerodynamic camper caravan with a teardrop design. The 1930s saw the rise in popularity of teardrop caravans due to the release of do-it-yourself construction blueprints in periodicals like *Mechanix Illustrated*. Up until their abrupt disappearance in the middle of the 1960s, these campers were rather popular. But plans were revived and teardrop caravans reappeared in the late 1990s, growing in favor once more.

3.3.2.1.2 Pop-top Caravans

Pop-top caravans use a liftable roof and sunroof for standing room, increasing volume and space-saving benefits. They reduce caravan drag and fuel consumption, and can be stored in homes or buildings' garages (Chamberlain & Mackenzie, 2014).

3.3.2.1.3 Mini CTP Caravans

A few small GRP (fiberglass) caravans are available. Poland was the first country where the CTP caravan was made. The body shell is made of one piece of plastic reinforced with glass fibers, making it durable. The interior fixtures are extremely basic in style. As the name implies, GRP material strengthens and extends the caravan's body when it is applied to its carrier elements.

3.3.2.2 Commercial Caravans

Commercial caravans are mobile trading spaces designed for sales, service, or industrial activities. They are often built to order, with interior layouts tailored to the enterprise's needs, and often equipped with utilities like water and electricity (Chamberlain & Mackenzie, 2014).

3.3.2.3 Off-Road Caravans

Off-road caravans are mini mobile vehicles used for off-road, safari, or land sports. They are towed by 4x4 vehicles due to their rugged construction and ground walking ability. Modern versions now include sleeping arrangements for up to two people and kitchenettes in the rear.

3.3.2.4 Luxerrior Caravans

A luxury caravan is a type of travel or lodging caravan with superior comfort, design, and technology. It features spacious interiors with trendy décor, comfortable beds, contemporary kitchen and bathroom equipment, sound systems, large-screen TVs,

automation systems, and smart home technology. Luxury caravans are often large-scale and have powerful engines for long-distance driving. They offer personalized styles and amenities, such as an electrohydraulic garage, to cater to the preferences of their clients.

3.3.2.5 Fifth Wheel Caravans

Five-wheel caravans, invented in the 1960s in America, are large, floor-divided vehicles used for long journeys, attached to cars or towed behind lorries (Woodmansey, 2022). The best example of this type of caravan may be Will Smith's caravan. The five-wheeled caravan has two floors and is generally used for film sets. The feature of the caravan is that it can expand vertically and horizontally thanks to the suspensions.

3.3.2.6 Camper Caravans

A camper caravan with living quarters and standard comforts is referred to as a 'camper caravan' when it is used for travel or camping. In general, the term 'camper' refers to a portable living and which includes caravans, which are typically made for camping. (Woodmansey, 2022).

Camper caravans come with various features such as bed and living areas, kitchen and dining areas, toilet and shower, storage areas, water and electricity systems, portability, and optimized exterior design. They can have seating and leisure areas, kitchen appliances, and multipurpose objects. They are often towed by a towable vehicle, making them ideal for those seeking a comfortable camping experience.

3.4 Caravan Usage and Purpose of Use

Caravans are compact, movable living spaces linked to vehicles with engine systems for mobility. They offer personalization, flexibility, outdoor living, and community. Users prefer caravans for mobility, cost-effectiveness, and outdoor living. They often form communities, sharing tips and advice, attracting people seeking a sociable lifestyle.

According to Okay (2015), "In caravan communities, sincerity and intimacy are more prevalent than in apartments. Dining is private, while cooking and eating together are common. Shared places promote encounters, and even the least genuine caravan residents engage in greetings and small discussions " (Okay, 2015).

Caravans offer compact, mobile accommodation, reducing hotel costs and providing greater autonomy for nomadic individuals during travels, making them a cost-effective alternative to traditional accommodations.

3.5 The Locations of the Caravans

The study examined interior and exterior space, equipment usage, circulation arrangement, modifications, installation systems, and traffic and accommodation assessments. It identified three types of camping sites: transit, recreational, and transit-recreational. Transit campsites are short-term, recreational campgrounds accommodate longer stays, and transit-recreational sites combine both. Infrastructural features can distinguish between temporary and permanent presence at a location, with permanent caravan houses relying on fixed infrastructure (Leivestad, 2017). Temporary caravans, like camping caravans, often seek close connections with

available infrastructure, while caravan parks rely on communal spaces for social interactions among users (Çolak, 2005).



Figure 17. Caravan park in Sakarya with association (TRT Haber) and users fulfil their need for extra space by building sheds (Okay, 2014).

3.6 Design Process and Interior Organization Caravans

The design process for caravans involves basic approaches and interior organization, focusing on modernism and minimalist lifestyles. Companies collaborate with interior designers, architects, and industrial designers to create compact living quarters. Seaton Lawrie, manager at Recreational Concepts in New Zealand, outlines the process, including initial versions, client aesthetics, functionality, and production using standard construction technique (Beckwith, 1998). Salih Fettan, "a caravan industry designer, uses dimensions from trade fairs, research, and marketing studies to create cabins. Emphasizes the need for well-designed interiors for motorbikes, considering whether the caravan will be used for holidays or as a permanent residence. The project definition includes towing or motor caravan, purpose, capacity, and size limits. The

company aims for cost efficiency, comfort, safety, and sound-heat insulation" (Buldaç,2021).

Bannister and Rothkopf caravan designers, described the execution of brainstorming sessions, sketching activities, and three-dimensional model investigations. Additionally, they stated that they generate numerous notions and select from them, with concepts typically derived from tangible ideas (Gürtekin, 2011).

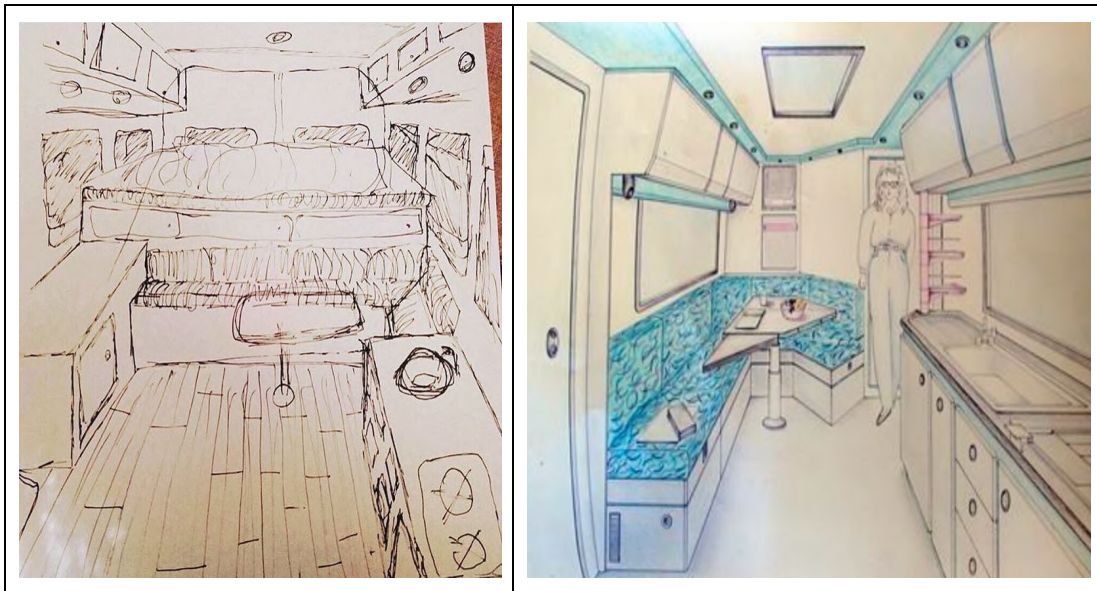


Figure 18. Interior organization detail of caravan (URL 12)

The caravan example (Figure 18.) provides a versatile living, eating, drinking, and sleeping space, with no privacy partitions. It features sleeping units that can be transformed from the sofa and dining area, storage space, and technical solutions in the front part of the vehicle, showcasing the definition of mobile space.

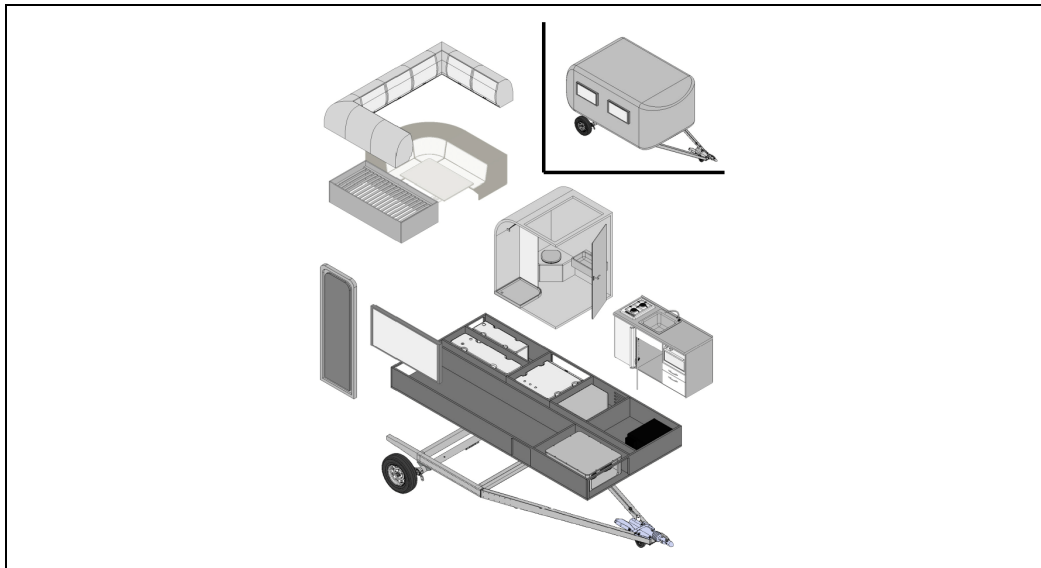


Figure 19. A caravan in concrete design phase (URL 13)

Basic Approaches Affecting Caravan Design

The researcher's background in design, academic study, and interviews led to the identification of fundamental approaches influencing internal space organization in caravan design, addressing user satisfaction and meeting their requirements (Gürtekin, 2011). Data from international caravan manufacturers, Knaus Tabbert and Recreational Concepts, was gathered through online conversations, focusing on factors influencing caravan design:

- Dimension and Weight Limitations
- Ergonomic Requirements and User Safety
- Hardware and Infrastructure Requirements
- Materials
- Users
- Flexibility
- Social Factor: Caravan Parks.

Dimensional limitations, equipment, installation systems, ergonomics, safety, economic restrictions, material selection, fittings, and production procedures are the main factors influencing the design process. According to Bruce Bannister from Airstream, "they must take into account the weight distribution, particularly the ratio between traction and weight, in relation to size limitations. Therefore, it is crucial to position heavy machinery, as well as clean and waste water tanks, beneath the floor" (Gürtekin, 2011). The design process of a caravan prioritizes ergonomics, incorporating inputs from anthropometric data to ensure user safety. The design prioritizes health and efficient body movements, with most equipment securely attached to the floor and side walls, eliminating the need for additional protective furnishings (Önder & Suri, 2022).

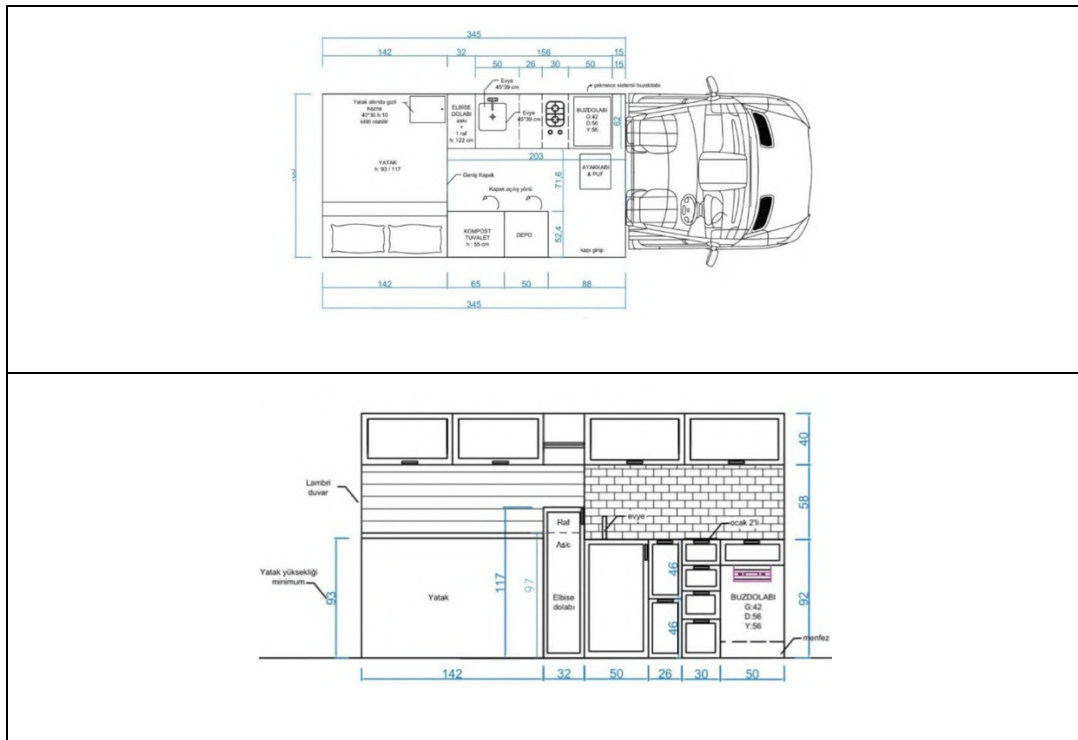


Figure 20. Caravan dimension and organization (Source: Önder & Suri, 2022)

The third element involves hardware and infrastructure requirements for a vehicle's living space, including electrical, water, heating, ventilation, and telephone systems. It also includes cold and hot interior insulation, heat, sound, and moisture insulation, and appropriate ceiling and floor coverings (Çelikbilek, 2019). The construction of caravans involves installing water tanks, hoses, and equipment, followed by woodworking and furniture components. Renewable energy sources like wind and solar power can generate electricity for appliances and heating water in toilets. The interior design focuses on angular elements for spaciousness and brightness, with light colors for limited spaces. Production techniques and materials are suitable for local environments (Tuncel, 2007).



Figure 21. Steel construction prepared to be coated with composite material in abstract caravan (Source: Çelikbilek, 2019)

Caravan designs are influenced by user influence, culture, and individual needs. Western caravans offer protection and social structure, while eastern caravans cater to individual needs. Flexibility is crucial in caravan designs, allowing for multiple living environments. The seventh element is the social factor, considering environment and

privacy. Caravan parks provide both individual and communal spaces, addressing physiological and psychological needs for a harmonious life.

Caravan camps, primarily designed for long-term use in North American countries like the United States and Canada, function as temporary camping sites within the tourism industry in European countries and our own.



Figure 22. York caravan park area map (URL 14)

The National Camping and Caravan Federation of Turkey (NCCF) has set standards for camping areas in Turkey. These standards include camping definition and site selection, environmental arrangement, entrance facilities, capacity and camper units, and common use areas. Campsites should be located on highway routes, city entrances, and in natural beauty areas for overnight accommodation, food and beverage, recreation, entertainment, and sports. The area should be isolated, drained, afforested,

and organized to prevent dust and mud accumulation. The units should be placed on both sides of the road for easier electricity distribution.

Organization of the Interior in Caravan Design

The interior design of caravans focuses on user needs, ensuring functionality for activities like cooking and family gatherings. User variability is influenced by factors like financial status, education, occupation, interests, cultural background, family structure, and age (Bayazit, 2008). Designing mobile homes for psychological and physical needs requires cohesive interior units using furniture and lightweight partitions, with technological advancements offering diverse options for living spaces (Tuncel, 2007).

Caravans are compact, portable dwellings with basic amenities like beds, kitchens, bathrooms, toilets, and sitting units. Popular for recreational and camping, they use dividing items like cupboards or screens, and use convertible beds, washbasins, chests, and drawers for storage (Altan, 2007) Caravans offer customized beds, storage bases, and kitchen equipment to cater to various sleeping and relaxing needs. They also feature mobile technology for a compact bathroom segment, including a fiberglass shower, low-level water-using toilet, and a closet for towels and cleaning supplies (Tuncel, 2007).

Caravan design is influenced by user passions, aesthetics, efficiency, and independence. Modern design prioritizes efficiency, reason, truth, and beauty. Caravans are strategically placed and addressed for both interior and exterior

challenges. Attention to detail is crucial for promoting and selling the vehicle, as it ensures a visually appealing form and successful product (Birtley, 2001).

Materials selection impacts product formal attributes and visual worth. Caravan units, with aluminum panels and wooden interiors, have distinct formal attributes compared to residential houses, and may have specific visual elements for certain user groups (Gültekin, 2011).

3.7 Spatial Organization of Caravans According to Types

As we have mentioned 3.3.1 motocaravan type title, the process of converting van-type vehicles in the minibus and panel into housing suitable for camper life is carried out by reconfiguring the contents accordingly. Unlike pulled caravans, these vehicles can be autonomously driven and do not require a second hammer vehicle. The organization of space in a caravanning vehicle does not have to be a challenge, although it does require some commitment. First of all, it should be noted that some things must be closed so that they do not move while driving.

The interior of a motocaravan should be designed to meet the user's needs, with functional cabinets and ground-level storage compartments for footwear and hydration. Insulation is crucial to control heat, sound, and moisture, and is installed in ceilings and floors. Water tanks, plumbing pipes, and equipment like a water pump are also essential. A dual water tank is necessary for caravan living, providing a sufficient reservoir for two people (Çelikbilek, 2019).

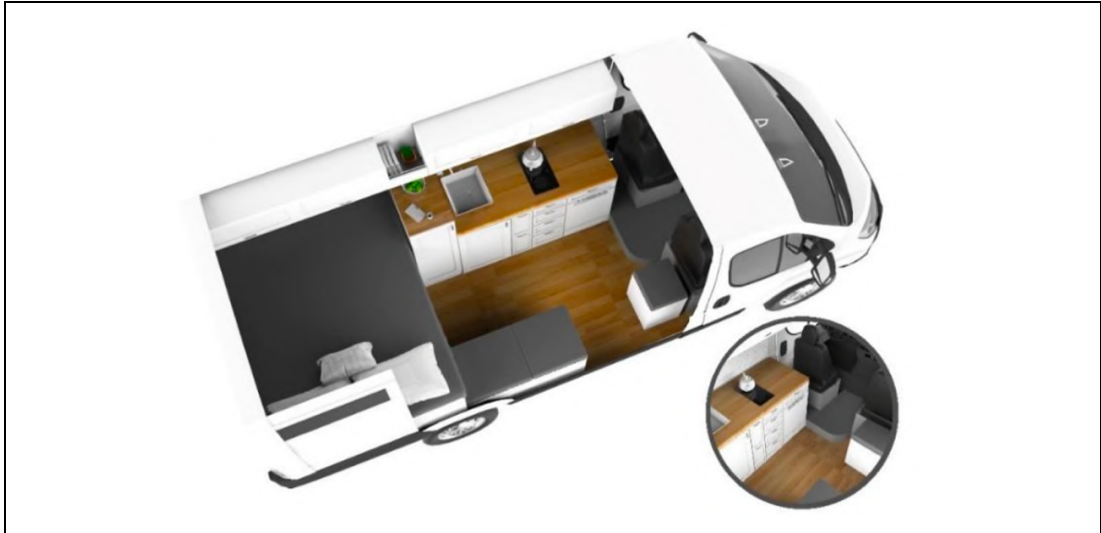


Figure 23. Motocaravan interior spatial organization (Source: Önder & Suri, 2022)

The motocaravan type includes campervans and alcove caravans, each with unique interior spaces. Campervans are smaller vehicles with basic amenities like a bed, fridge, and cooking stove, lacking luxurious amenities like bathrooms. They are maneuverable and equipped with advanced power systems, a kitchen with customized appliances, an oven, and a refrigerator. Alcove caravans have large tanks for drinking, cooking, and cleaning water, and can be converted into beds. (Francis, 2022).

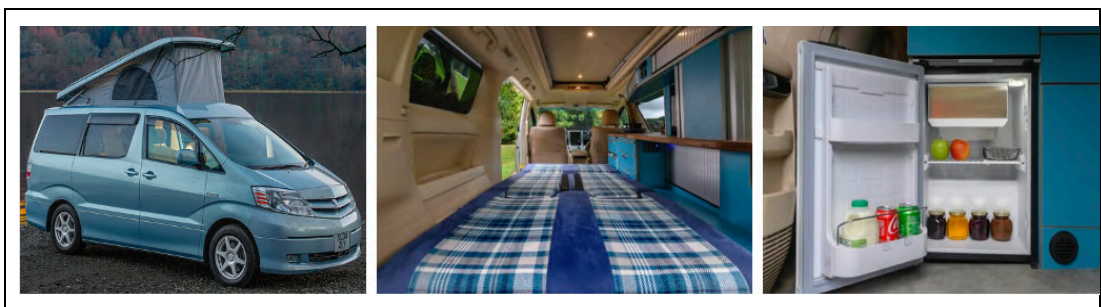


Figure 24. Campervan example Alphard Pioneer II and interior organization

Alcove caravans, as specified in section 3.3.1.2, are often motorhome vehicles that have minimal amenities such as a bed, a refrigerator, and a simple cooking oven.

Alcove caravans feature a bed above the driver's seat, combining the compact dimensions of a semi-integrated caravan with the spaciousness of a fully integrated one. The high roof structure allows for the installation of an additional double bed without compromising other features, ensuring a comfortable and spacious design.



Figure 25. Alcove caravan interior organization (URL 15)

As mention 3.3.2 towable caravan, In Articles 42 and 52 of the Highway Traffic Regulations, caravans can be of two types: light mini caravans and heavy off-road caravans, five-wheel caravans, commercial caravans and luxury caravans. When towing a light mini caravan, equipment (furniture, stove, bed, table, toilet, etc.) should not weigh more than the specified amount. The space organization of towable caravans is discussed as mini caravans, commercial caravans, off road caravans, luxury caravans and fifth wheel caravans.

Teardrop caravans are nostalgic, minimalist caravans with a galley, compact toilet, and storage battery for power. They are popular due to their nostalgic appeal and are often favored by users. Pop-top caravans are compact, efficient vehicles with a detachable roof, retractable ceilings, and removable roof for increased storage and convenience. They're suitable for camper vans and minibuses, offering cost-effective and easily repairable options. The Fifth Wheel caravan provides stability, cost-effectiveness, and safety with a spacious interior layout and gooseneck connection, ensuring quick and secure journeys with remote control tethering.

3.8 Legal Situation of Caravans in the World

Towable caravans are subject to the regulations specified in the Highway Traffic Regulations of the country in which they are located. Article 3 of Article 218, published in the official newspaper No. 23053 dated 18.07.1997 in Europe, explains the special criteria that a vehicle must meet in order to be classified as a caravan (Arı, 2019).

As a result of the research, there is no need to obtain a permit or license for caravans within the scope of the zoning law. It can be located on zoned land or land with field status. In such cases it has the same legal status as a 'fixed vehicle'. However, mobile microhomes on wheels are subject to different regulations when parked in a designated area for commercial purposes.

Turkey's caravan laws mandate a chassis design project and mass manufacturing certificate, ample power, and a brake system for towing. Caravans are exempt from Motor Vehicle Tax but must have a valid inspection on highways. They must have a

convertible sleeping berth, storage units, and cleanliness water tanks. Regular inspection, maintenance, and cleaning are required (Şengül, 2019).

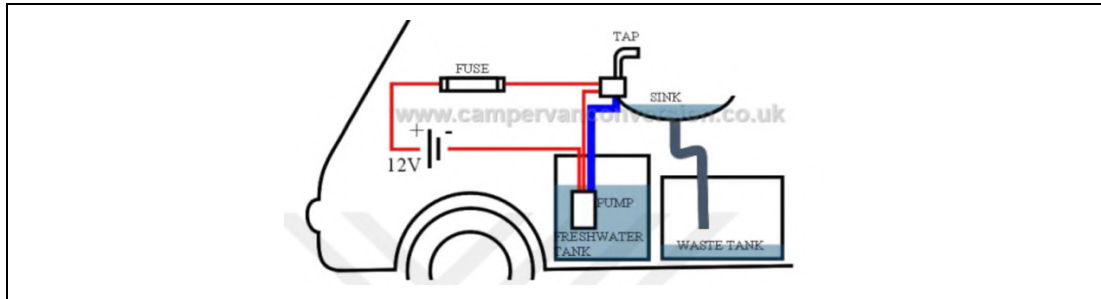


Figure 26. Dirty and clean water installation (Source: Arı, 2019)

Caravans come in various sizes and purpose, with some lacking wet areas and toilet facilities. They require proper waste disposal and portable composting systems. Kitchen units must comply with legal requirements, have safety features, and have fire-resistant plates. Regular cleaning and filter replacement are essential. Careful selection of colors, textures, materials, lighting, and windows is crucial (Arı, 2019).

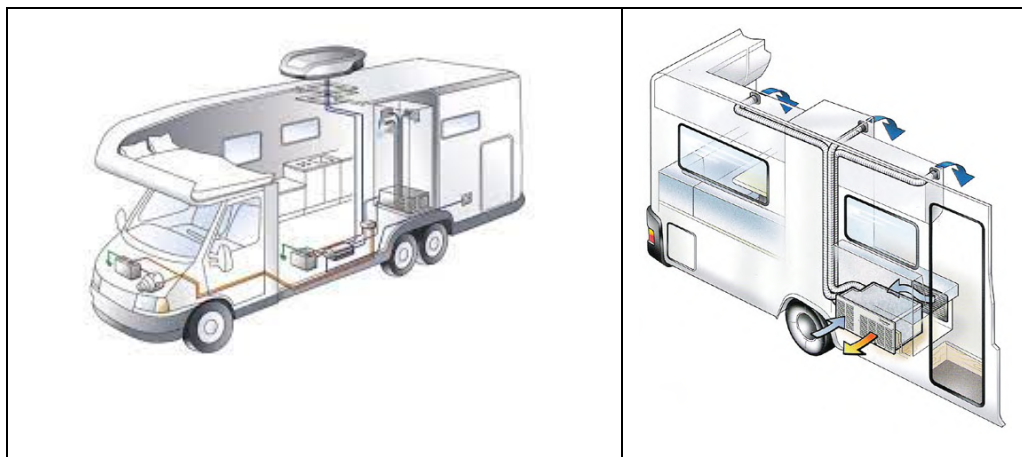


Figure 27. In Vehicle Air Conditioner Circulation Diagram (URL 16)

3.9 Chapter Conclusion

In this section, firstly, the history of caravans is discussed, and the formation of caravans and the first use of caravans chronologically in history are discussed and tabulated. In the following headings, the definition of caravans and general types of caravans are discussed and presented with examples, and the spatial organization of caravan types is examined. The design organization according to the types of caravans has been discussed, and the general laws of design have been informed. This section discusses all the factors that affect the design. As human progress and societal shifts have occurred, the building of transportable spaces has undergone alterations in structure, design, and materials. Researchers have analyzed the changes in the spatial structure of mobile houses using methodologies and methods that align with the needs of the era. The progression has shifted from compact, monocular, quadrilateral, or rectangular layouts, where areas are partitioned based on diverse requirements, to floor plans with several rooms. The interior of mobile houses has transformed from a basic single room on wheels to fully equipped households, complete with living rooms, kitchens, bathrooms, sleeping places, and other amenities commonly seen in traditional homes (Tuncel, 2007). The modifications and enhancements to the energy sources utilized in mobile homes have also revolutionized the inside arrangement of these dwellings, rendering them suitable for people seeking a comfortable lifestyle. Modifications in heating, ventilation, and lighting systems have caused notable alterations in mobile homes. These modifications include shifts in the control of action zones and the customization of rooms (Tuncel, 2007).

Chapter 4

CASE OF CARAVAN FOR ACCOMADATION IN NORTH CYPRUS

In this chapter the merthod type of the research is specified and the results of the survey conducted with caravan users are analysed and evaluated in graphs and recommendations are in this section. The titles in this chapter are Methodology of the case studies analysis, caravan usage and purpose of caravans in North cyprus, location of caravans in North Cyprus, general evaluation for selected locatios of caravans in North Cyprus, spatial organization of caravan indoor environment in North Cyprus, spatial organization of caravans semi open and open spaces in North Cyprus, general evaluation of the spatial organization in Norht Cyprus, general analysis of caravans and caravan users and Legal situation of caravans in North Cyprus.

4.1 Methodology of Analysis of the Case Studies Analysis

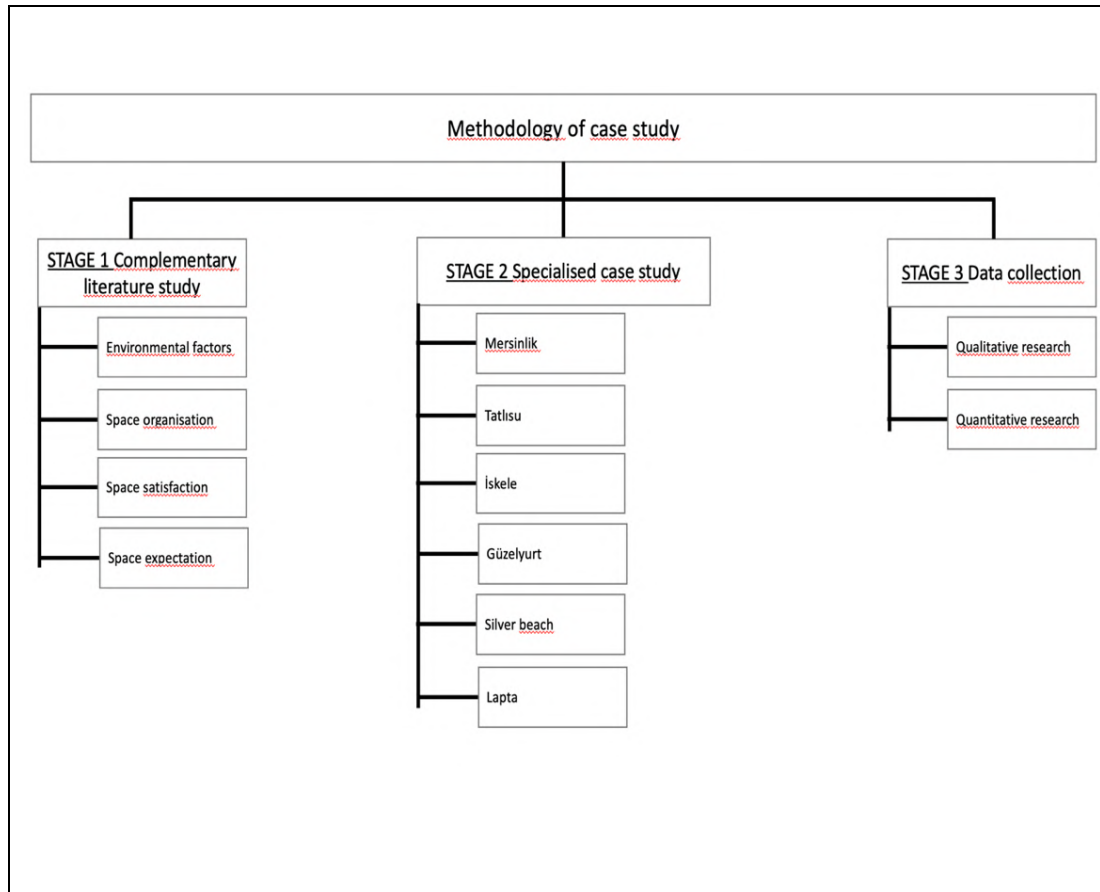


Figure 28. Methodology steps

This research will use a mixed-methods approach, starting with an integrative literature review to understand physical environmental factors, space satisfaction, and user perspectives on spatial expectations. The study will then engage with caravan users in Gazimağusa, Northern Cyprus, through exploratory discussions and open-ended questions. A quantitative survey will be conducted to collect data and generalize results. The study also employs a phenomenological approach to analyze user experiences while traversing slopes in caravans, allowing individuals to express their

understanding and experiences (Rose, Beeby, & Parker, 1995). The study explores user satisfaction with mobile spatial caravans for tourism, using literature review, observational and survey research. It identifies various scenarios and social connections encountered by caravan users, highlighting the impact of environment on human behavior and context. (Bernard, 1995). An examination based on observation and survey for the evaluation of caravan areas and user satisfaction has been conducted in the Northern Cyprus Turkish Republic. Regions with a high density of caravan users were selected for this examination, including Mersinlik, Tatlısu, İskele, Güzelyurt, Silver Beach, and Lapta, which are widely used for tourism purposes. The study involved an observation and survey of a sample size of 48 users.

4.1.1 Map Analyzing

First of all, information about the caravan parking areas in the Turkish Republic of Northern Cyprus was obtained by making a formal interview with the municipalities; Silver Beach, İskele coast area, Kocareis park area, Tatlısu caravan park area, Mersinlik caravan park area, Lapta caravan park area and Güzelyurt caravan areas. These regions were found on maps, and support was provided for analysis on the map and how to reach the region. Maps are crucial for performing area analysis, location-based research, and urban planning and design tasks. Therefore, map analyzes are indispensable when analyzing a particular location in terms of its spatial characteristics and formulating new local connections.

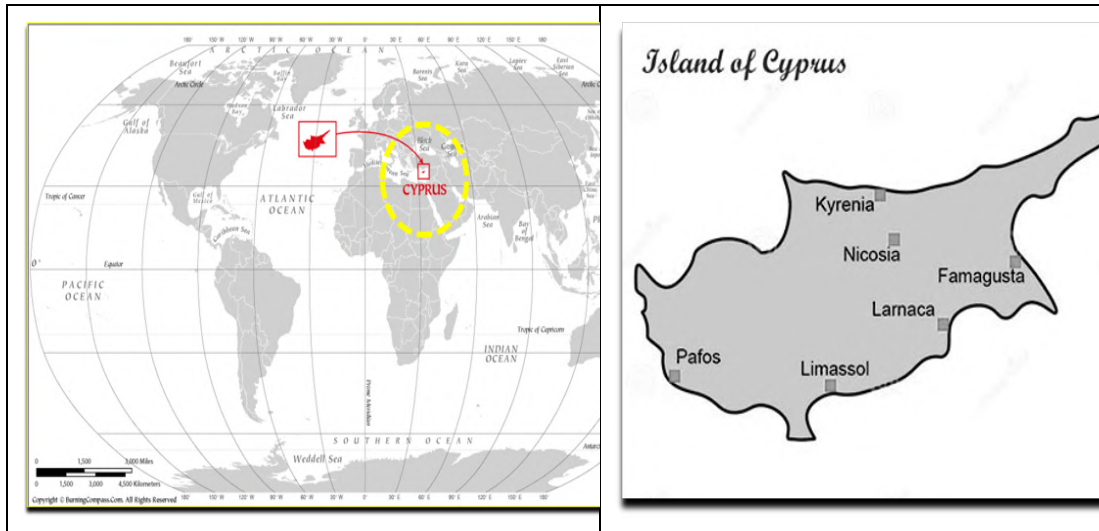





Figure 29. Map analyzing, Cyprus location on World

	<p><u>Famagusta – Silver beach area</u></p>
	<p><u>İskele – Kocareis camp area</u></p>
	<p><u>Tatlısu – Kaplıca camping area</u></p>

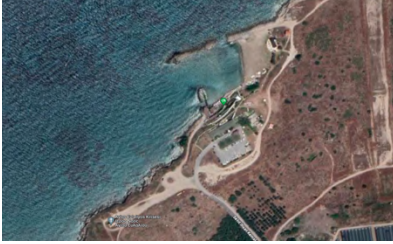
	<p><u>Mersinlik – Karavan camping area</u></p>
	<p><u>Kyrenia – Lapta camping area</u></p>

Figure 30. Satellite images of the regions where the research was carried out

4.1.2 Observation

Observation is a study methodology focused on comprehending human behavior within specific physical environments. This research investigates the satisfaction of caravan users in Northern Cyprus, focusing on behavioral patterns and the connection between users and the environment. The study was conducted in July, considering factors like weather conditions and user density. Participants were classified based on gender, age group, and caravan zone, and the results were documented using sketch plan drawings and symbols.

4.1.3 Site Survey

Field research is the primary method used to analyze and identify caravans and caravan site occupants. Interviews were held in Mersinlik, Tatlısu, İskele, Güzelyurt, Silver Beach and Lapta caravan sites by assigning different numbers of users according to the density of the sites and the number of people. Topics included caravan classification, storage structure, wasted space, technological solutions, and more. Photographs are the main tools for conducting field surveys to examine the spatial

layout of the caravan sites in question and to reveal how caravanners use and distribute themselves within the site. Field surveys typically assess statistics such as the number of caravans in the area and the number of people using them.



Figure 31. Site survey in Kocareis caravan park and technical analysis in Sapanca caravan park (Photos Taken by Author, 2023)

4.1.4 Informal Survey

In order to obtain reliable and accurate data collection, the research involves physically visiting the municipalities and community centers in the caravan regions and establishing direct personal communication. As part of the data collection process, the researcher conducted an informal interview with the individual responsible, who shared an authentic narrative or incident relevant to the research.

4.1.5 Mixed Survey

A survey was conducted to evaluate and analyze the perceptions and satisfaction of users using caravans in mobile environments. Surveys were created in English and Turkish to reach 48 users from various community groups. Before preparing these surveys, meetings were held with municipalities and caravan parking areas were specified. These park areas were visited and an area analysis was first carried out. As

a result of the area analysis, the ways in which caravanners use the area were observed and the questions to be asked to the users regarding user satisfaction were stated. Before the study, a field survey was conducted to determine the population density in Mersinlik, Tatlısu, Lapta, Silver Beach, İskele and Güzelyurt regions. Survey participants were then allocated according to the density determined in each location. A total of 48 participants, all local residents, participated in the survey. It is worth noting that everyone living in the area is a Cypriot citizen and the survey divides the participants into various age groups. The responses to the survey were evaluated as a percentage; 45% of the participants were women and 55% were men.



Figure 32. Survey with caravan users in Kaplıca (Photos Taken by Author, 2023)

4.2 Caravan Usage and Purpose of Caravans in North Cyprus

Cyprus's population has grown significantly, leading to a shift towards caravans as an alternative to urban living. The rising population has led to a shift in space design, with mobile space becoming more popular. Northern Cyprus, a Mediterranean island, is primarily used for tourism, nature visits, and accommodation due to its natural beauty

and historical significance. Caravans offer a cost-effective alternative to hotels and holiday villages, allowing travelers to enjoy nature-related activities and establish their homes in coastal regions. However, legal requirements and parking rules must be thoroughly addressed to ensure the continued growth of caravan usage in Northern Cyprus.

4.3 Location of the Caravans in North Cyprus

The study examines caravan use in Northern Cyprus, focusing on preferred regions and accommodations. It also examines the legal framework and user satisfaction in the regions. The study also evaluates the environmental impact of caravan use, focusing on reducing harmful batteries and generators, and promoting sustainable electricity. Users who have the means to use caravans are also considering using solar panels to protect Cyprus' natural environment.



Figure 33. Indication of the regions where the research was carried (Photos Taken by Author, 2023)

A comprehensive investigation was conducted on caravan areas in Northern Cyprus, involving maps, interviews, and site analysis using satellite images. A cartographic representation was created, and town information was obtained. Satellite images were used to assess infrastructure and environmental conditions. Community viewpoints were also gathered. The study aimed to identify problems and provide recommendations for improvement, which would be shared with stakeholders.

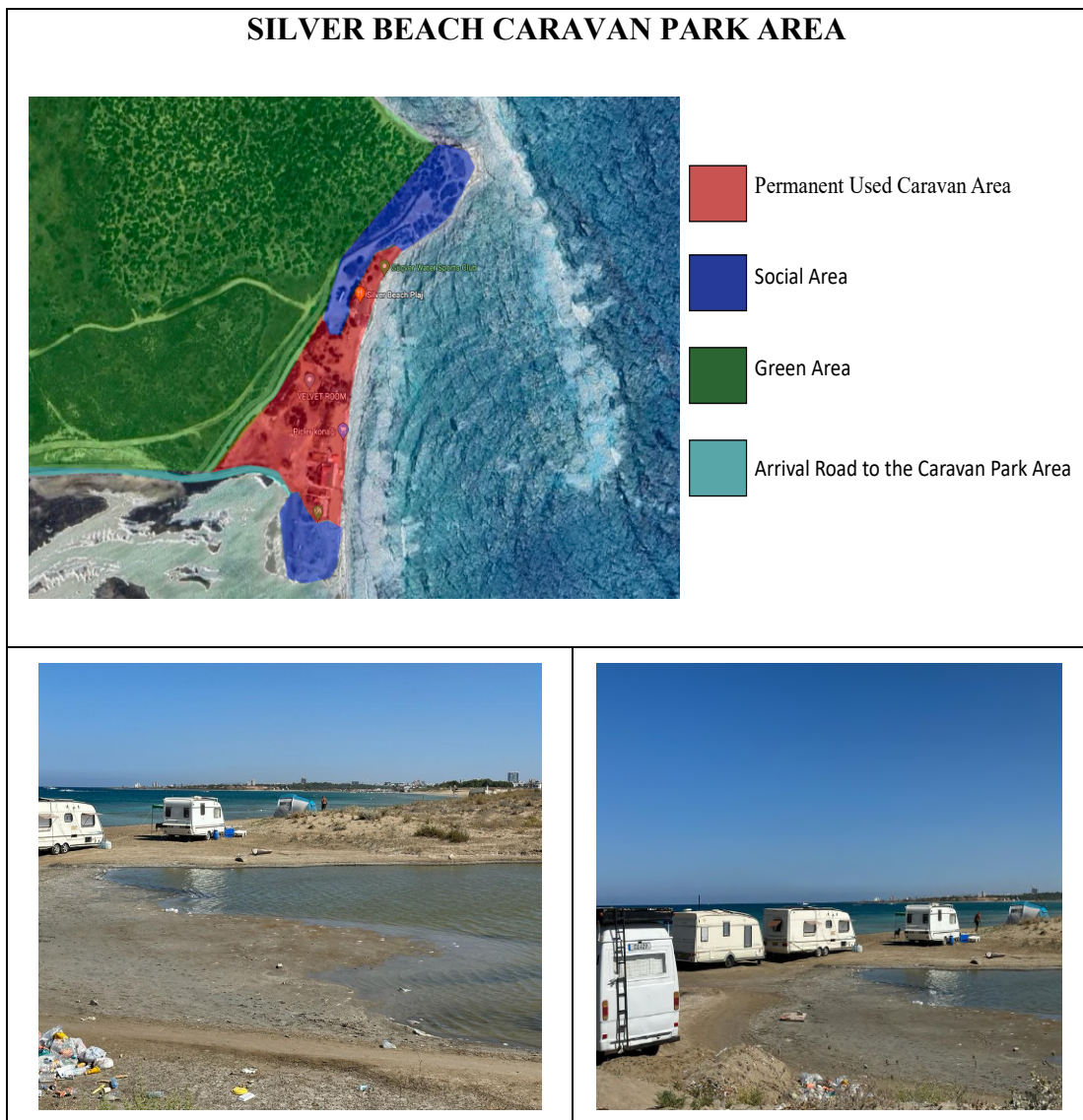


Figure 34. Caravans, caravan users and environment effect in Silver Beach (Photos Taken by Author, 2023)

A formal interview was conducted with Famagusta Municipality in June and information was received that there is no caravan park in the region and that caravan users stay in private lands or private areas. Due to the absence of a designated caravan parking space in Famagusta, individuals who own caravans opt to visit the Silver Beach region during the summer season for recreational purposes. The population of caravan users in the Famagusta-Silver Beach area is extremely limited. Based on the questionnaires and studies done with the users, it was determined that the Famagusta Municipality's decision to remove the problematic caravans in the region (Figure 35.) is the cause of both the daily usage of this area and the low number of users.

According to Section 2.6, the arrangement of the inside of movable space is described as "Mobile housing, in contrast to stationary housing, has the ability to exist without causing pollution, safeguarding, or harming the environment (Smithson & Smithson, 1970)". This statement holds significant value for this particular region. Due to legal restrictions, caravanners are occupying this region near the coast against their will. Due to the lack of law



Figure 35. A headline from Kıbrısgeç Tv Newspaper 'Caravans are being towed in the Silver beach area' (URL 17)

Famagusta Municipality on the demands of caravanners in the area, it has been noted that the limited number of individuals utilizing this space have a detrimental impact on the environment. Their garbage contributes to environmental degradation, and they even discharge contaminated water into the marsh. This is due to the absence of a subsurface aquifer or sewage infrastructure in the region.



Figure 36. Legal specially allocated parking space and negative parking area used by permanent caravans (Photos Taken by Author, 2023)

A discussion with Famagusta Municipality revealed a lack of a designated caravan park in the area, leading users to resort to privately owned grounds or private locations. A questionnaire survey of 10 users revealed that 80% of the population is men, with the majority aged 31-40. The majority are married, with 50% being single and 50% being married. Users marital status is half and half. Also Most users have a university degree. Most of users seeking a peaceful escape from crowded environments but they don't have any caravan park area in famagusta.

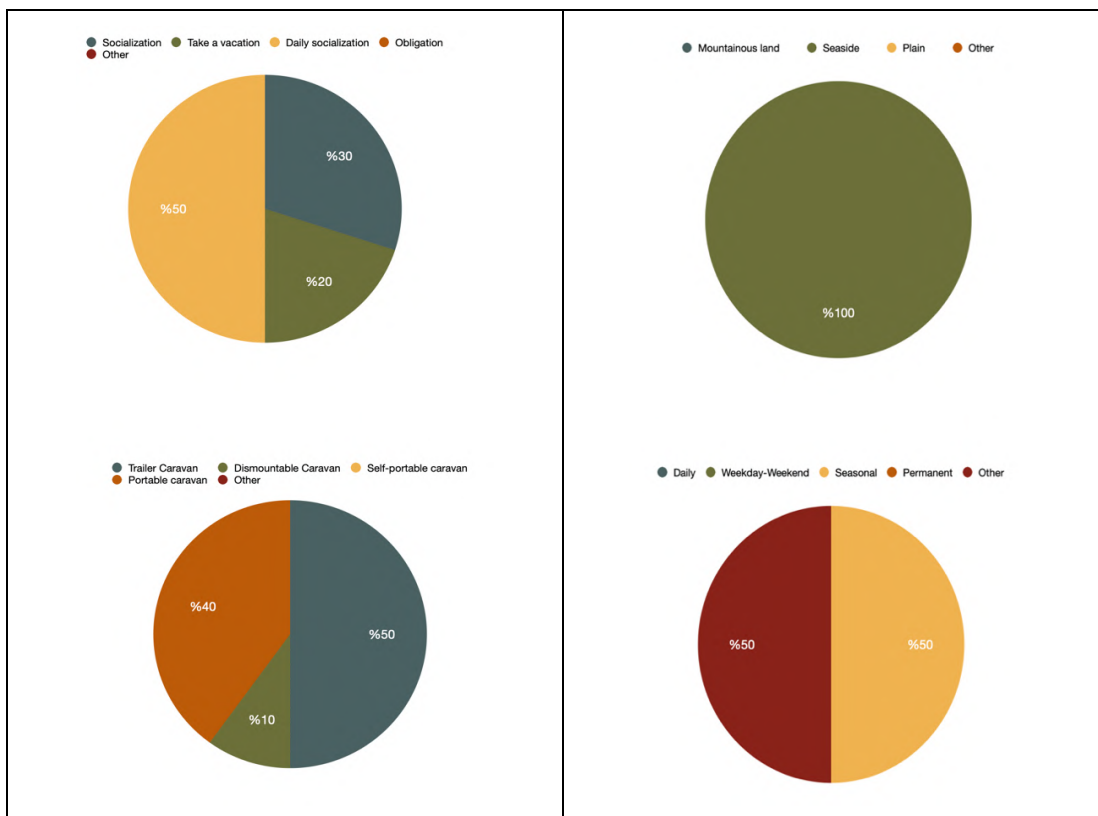


Figure 37. The types of caravans used by users and their frequency of use and The usage periods and regions where caravan enthusiasts engage in activities

The Kocareis caravan park in Northern Cyprus has a diverse range of caravan categories, with 50% of users choosing the caravan, 40% opting for the Portable caravan, and 10% preferring the Dismountable caravan. The majority of users prefer

the caravan for stable living conditions and facilities, while 40% prefer the Portable caravan for compact and temporary purposes. The remaining 10% prefer the Dismountable caravan for a stable lifestyle. The park's accommodation preferences were analyzed, with 50% of users staying in regions other than Famagusta, Karpaz, Girne, and Lefkoşa, and 50% in the Famagusta region. 44% camp on available land, while 56% choose private caravan parks. This data shows a balanced distribution among caravan users, with no significant difference between those choosing caravan parks and those camping in open areas or leading a caravan lifestyle. The half and half ratio indicates an equal preference among these two groups.

The Kocareis caravan park has a diverse user base, with 50% of users using their caravans during summer holidays, 40% during winter, and 10% during spring. The majority of users use caravans for social purposes, while others spend time with families, socializing, or solitude in nature. A survey of 10 users revealed that 50% use caravans for seasonal purposes and 50% for continuous use.

The park accommodates both permanent residents and seasonal visitors. The coastal area is leased to caravan users, who initially use it on a seasonal basis. Over time, they designate specific areas and use caravans as semi-permanent structures, creating unauthorized residences. Both types of caravan users use designated park areas for holiday periods, but some have transformed the park into a negative space by permanently using caravans and enclosing open areas.

As a result of surveys and formal interviews, the Iskele municipality has decided to immobilize and dismantle all caravans causing the transformation into a negative park area and to demolish the enclosed areas. During the survey studies, it was concluded that users in the park area were psychologically tense due to the municipality's decision, attributing it to economic reasons and the absence of specific regulations.

Caravan users in Kocareis park face challenges due to lack of proper infrastructure and legal affiliation with municipal parking places. The lack of water and electricity infrastructure has led to individuals relying on personal means of transportation, such as batteries and generators. The happiness level among residents varies, especially between those along the coastline and those in nearby surroundings. Those living near the seaside have private areas for their caravans and use semi-open areas constantly. Caravanners in the parking area do not have permission to park or areas to stay permanently. Caravanners in this area have closed their caravan surroundings and added semi-open areas, and they continue their lives in these added areas.

Caravan owners have taken on the responsibility of enclosing their surroundings to construct their private spaces, but these privately established areas have received eviction warnings due to their illegal status. Overall, the location selection level among residents in Kocareis park varies, with 80% preferring coastal areas and 20% preferring mountainous areas.

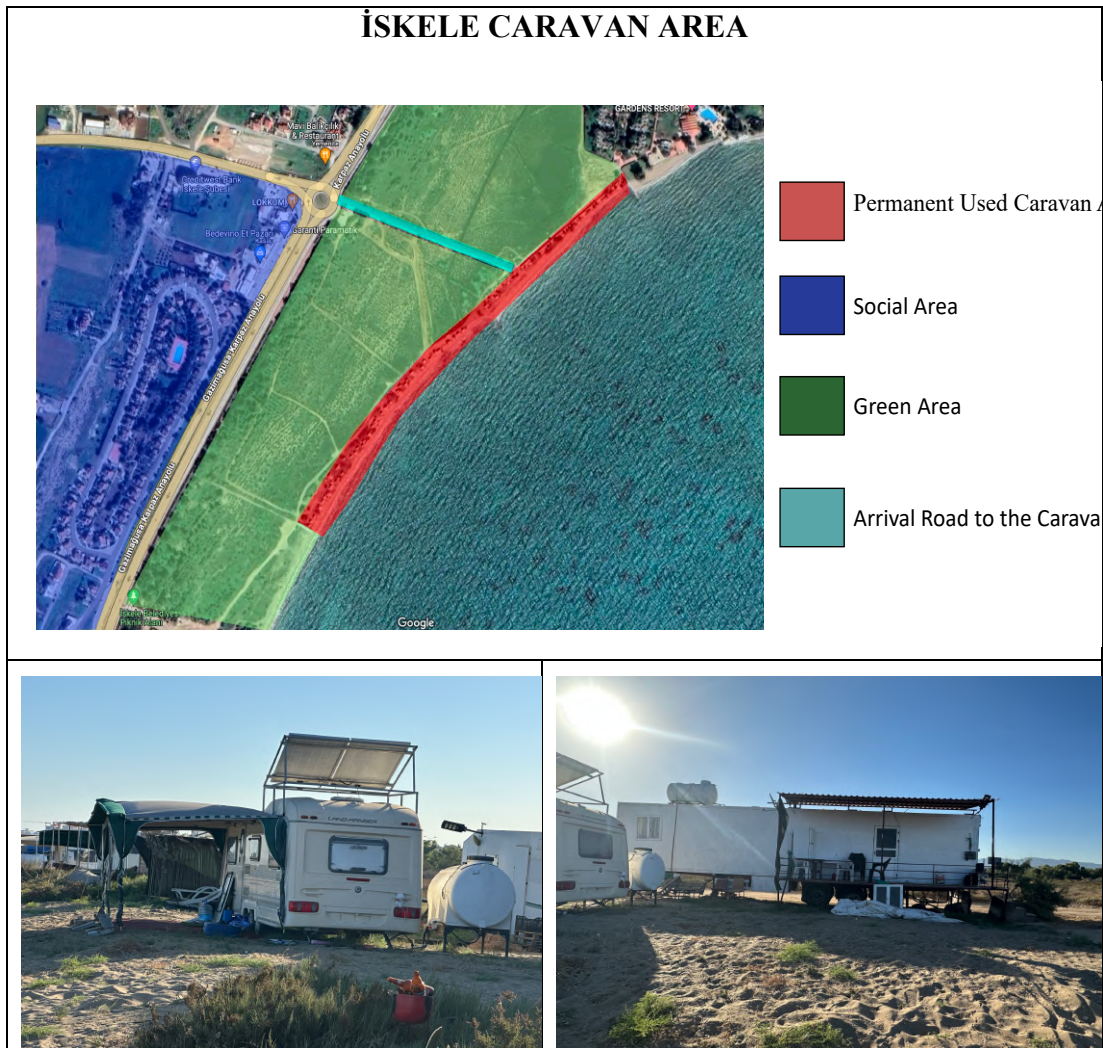


Figure 38. Motocaravan that meets its electricity needs with solar panels and transforming fifth wheel caravans (Photos Taken by Author, 2023)

Formal interviews were conducted with the İskele Municipality in order to collect information regarding caravan parks in the İskele area. However, it was found that the İskele region does not have any caravan parks, and those who travel in caravans typically choose to stay on their own land. Caravan users were accused of illegally settling in the seashore zone near the İskele hotels sector, without permission to utilize the designated private lands. Upon arrival in the vicinity, an initial assessment of the region was conducted. The data pertaining to caravan users was subsequently collected via a survey study that encompassed ten individuals from the local community that

utilize caravans. This study aims to provide significant insights into the activities and characteristics of caravan users in the İskele region.

The Iskele caravan park region in Kocareis has a diverse user base, with 60% male and 40% female. The majority of users are married, with 35% holding a university degree, 29% having completed high school, 24% falling into the "other" category, and 6% holding a Master's degree. The region is exclusively used by married couples, with the majority falling under the higher age bracket. Working circumstances reveal that 67% of users are in retirement, 22% are employed, and 11% are unemployed. The majority of users are older couples and retirees, opting for a caravan lifestyle for vacationing, relaxation, and escape from daily life. The majority of users are employed and seek a more immersive lifestyle in nature. The majority of users prefer caravans for living accommodations, with 70% preferring them. Travel caravan are popular due to demand for roomy mobile lodging, especially during summer months. Other types include dismountable, portable, and other types.

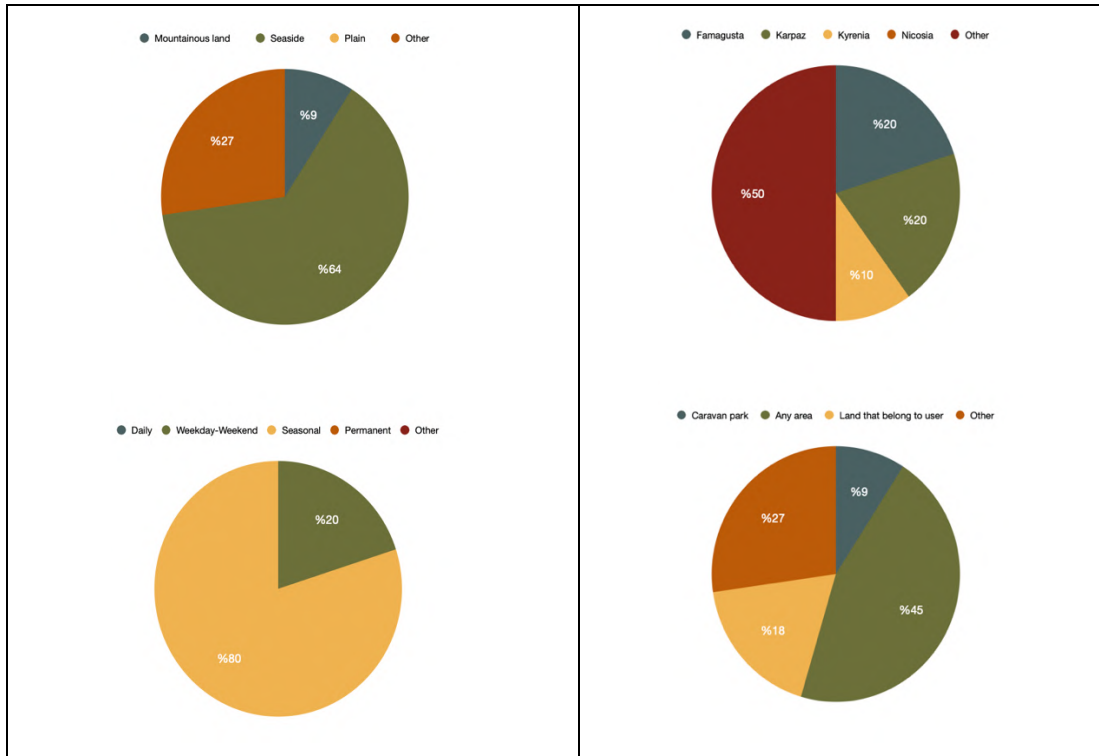


Figure 39. The usage periods and regions where caravan enthusiasts engage in activities. And the regions where caravan enthusiasts typically stay and their accommodation preferences.

The Iskele coast area in Northern Cyprus has a high preference for alternative accommodation, with 50% of users opting for alternative regions like Famagusta and Karpaz. 45% camp on suitable terrain with their caravans, while 27% prefer alternative terrains. 18% use personal land, and 9% use designated caravan parking spaces. The lack of available coastline land for periodic usage is the primary reason for this preference. The region sees 70% of caravan users during summer holidays, 20% during winter, and 10% during other periods. 45% prioritize family time, 36% escape social life, and 18% enjoy solitude in nature. Fixed caravans are most used during summer, with retirees and elderly individuals using them for socializing. However, concerns about legal protections for caravan users in the area have been raised, with the municipality not assigning specific spaces or parking lots. The survey suggests the

construction of caravan zones in designated areas to maintain a pristine atmosphere. The main obstacle for caravan users is the absence of enclosed park sites, water facilities, and electrical power sources. The Iskele Municipality has decided to lock and remove caravans belonging to caravanners in the area.

In summary, there is no legal provision for accommodation rights for caravan enthusiasts in the coastal region of İskele. Caravan dwellers have discovered and established settlements in this area independently. While their satisfaction with the caravan lifestyle and the park area is generally positive due to their close connection with nature, tranquil environment, and social aspects, the absence of specific lodging laws and essential facilities results in a neutral satisfaction status. Despite the positive aspects, the lack of defined regulations and the initiation of eviction processes contribute to a low level of satisfaction among users in the caravan region.



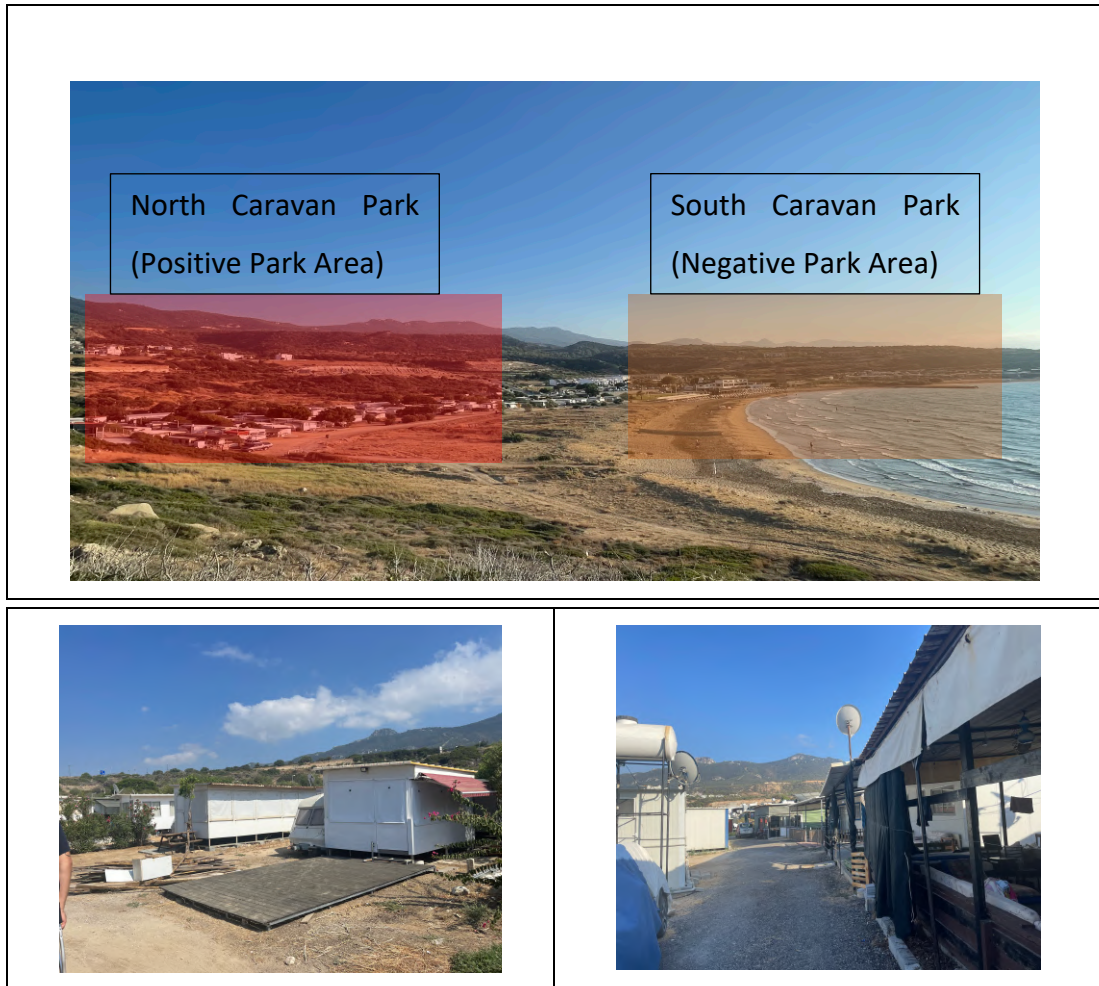


Figure 40. Positive caravan park area, and negative caravan park area semi open spaces. (Photos Taken by Author, 2023)

Tatlısu Municipality has identified a private caravan parking area in the region, with 90% of caravans staying permanently and 10% using it seasonally. The southern section is used as a negative parking area, while the northern section is used as a positive one. The Kaplıca caravan park area has a male user population of 70% and a female user population of 30%, with the majority being married couples with advanced education levels. The region has a significant number of users, with 60% in retirement, 30% employed, and 10% unemployed. The majority of users prefer caravan living, with 50% using it for socializing with the environment, 25% for escape from crowded

life, and 13% for small spaces and workload relief. Users adopt a life by establishing a social bond with their chosen environment, seeking a break from crowded life and workload.

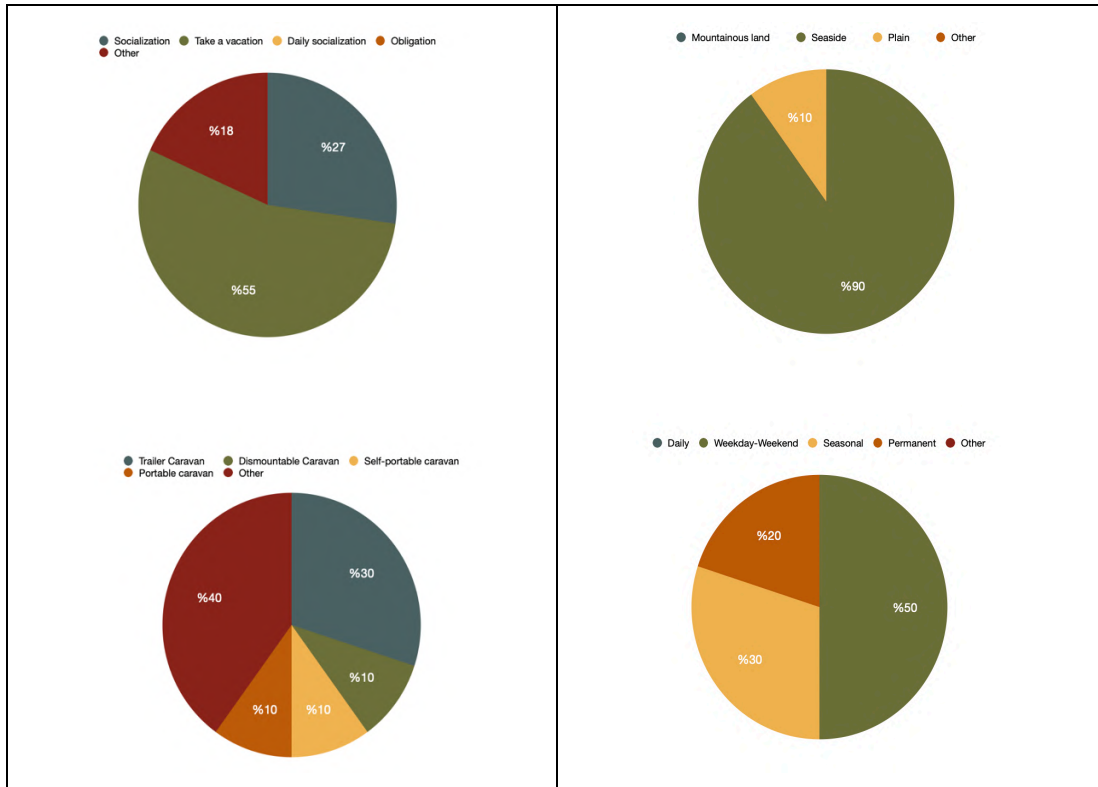


Figure 41. The types of caravans used by users and their frequency of use and the usage periods and regions where caravan enthusiasts engage in activities.

The Kaplica caravan park in North Cyprus offers a diverse range of caravan types, with around 40% of users preferring Other caravans, 30% using Towable caravans, and 10% using Dismountable, portable, and self-portable caravans. Fixed caravans are widely used for holiday purposes, with 55% using them for holiday, 27% for socializing, and 18% for other purposes. Karpaz region is preferred by 70% of users, while Famagusta is chosen by 30%. The data suggests that passionate caravan enthusiasts choose to stay in various locations, including private lands and designated

caravan park places. The Kocareis park has both positive and negative park areas, providing convenient facilities for temporary users and allowing permanent occupants to personalize their surroundings. The Kaplica caravan region uses 40% of its users in the spring season, 20% in the summer, and 40% during other months. 45% of users prefer family-oriented activities, while 18% prefer solitude and interaction with nature. These insights provide a comprehensive understanding of the seasonal and motivational preferences of caravan users in the Kaplica region, emphasizing the various reasons why people choose to live in this area. In the northern region inhabited by caravanners, there exists a wastewater treatment system and a pure water reservoir that is refilled weekly by tanker trucks. Similar to the Iskele district, this area is leased to caravanners as private property. Each caravan user is allocated certain designated areas where they can park their caravans. Users have enclosed their partially open sections, which were allotted for them, in order to expand their living space. They exclusively employ caravans for transportation.



Figure 42. Water supply system and waste water installation for caravanners in the northern region (Photo Taken by Author, 2023)

The southern region of northern Cyprus faces challenges due to inadequate infrastructure for wastewater treatment, electrical installation, and water storage. The unallocated land makes caravanners expand their caravans, often using pre-made homes or containers. Both regions lack legislation for accommodation, with northern caravanners relying on landowners and southern caravanners lacking specific legal and park areas, leading to unorganized settlements and environmental deterioration. Both regions require improved infrastructure and regulations to meet their needs.

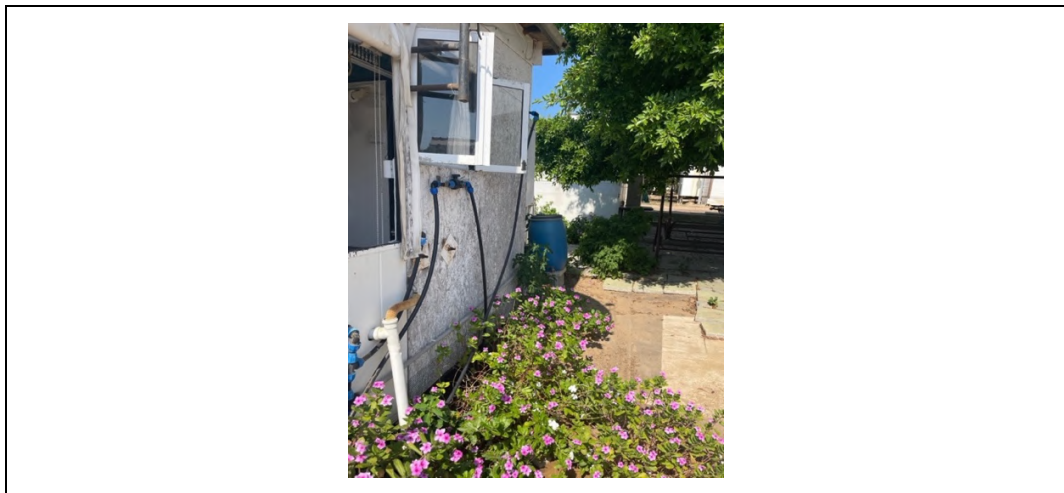


Figure 43. In the southern region, caravanners use water in barrels for plumbing
(Photo Taken by Author, 2023)

The Tatlısu Caravan Park region has two main user groups: northern and southern. In the northern region, caravan owners express contentment with the spacious, convenient, and trouble-free amenities, primarily used by retirees. In contrast, in the southern region, users face more challenges in terms of contentment with caravan living. They have independently addressed water and electrical infrastructure, separating their partially enclosed and fully accessible areas. They either meet their basic needs at nearby communal establishments or seek solutions independently. To

improve the user experience in the southern region, a thorough examination of these difficulties is recommended. This could involve identifying areas for improvement and formulating recommendations. Including statistical data, qualitative interviews, or literature reviews could provide a more comprehensive understanding of the user dynamics of Tatlısu Caravan Park.



Figure 44. Mersinlik Caravan park area, caravans parking near to the seaside (Photos Taken by Author, 2023)

A survey in the Mersinlik caravan park region revealed that 60% of users are seasonal, with 40% being permanent residents. The majority are male 63%, with 38% being females. Users aged 51-60 exclusively use the area. 75% are married, with 88% having a university degree and 13% holding a master's degree. The majority of users have advanced educational qualifications and are currently employed. The Mersinlik caravan park is primarily used by couples, with 100% using caravans to escape the crowded environment. This is due to the different working principles of the majority of users, who seek a free and comfortable quality of life with their caravans during the summer season.

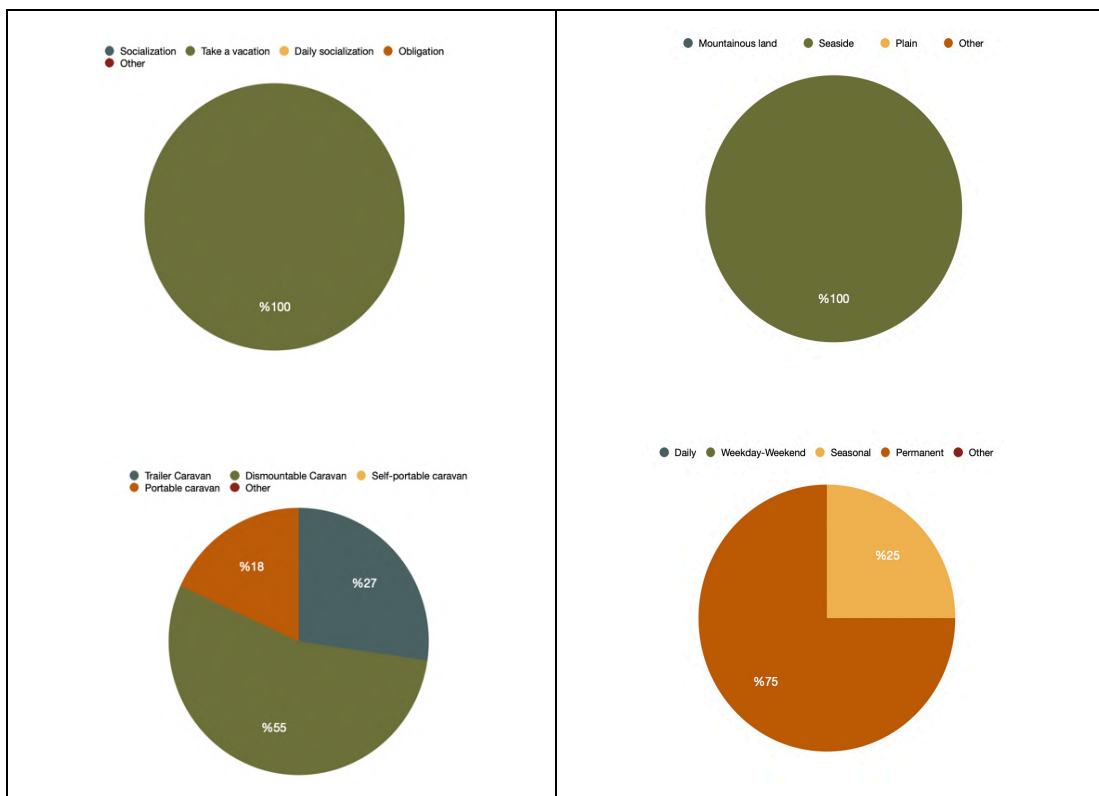


Figure 45. The types of caravans used by users and their frequency of use and the usage periods and regions where caravan enthusiasts engage in activities.

The Mersinlik caravan park in Northern Cyprus has a diverse range of caravan types, with 55% of users preferring dismountable caravans, 27% towable caravans, and 18% portable caravans. These types can be permanently stationed in the park area and disassembled to expand semi-open spaces. The park's users, accounting for 100%, use the park for holiday purposes based on their chosen caravan types. A pie chart reveals that 63% of users prefer the Famagusta region, while 30% prefer the Karpaz region. The majority of users 88% prefer caravan park areas, with 13% choosing other locations.

This indicates a significant preference for the Famagusta region, with 63% of users choosing this area for their stay. The park's users do not opt for "any area" as their accommodation choice, and the Famagusta region is the most preferred area for accommodation. The popularity of caravan park areas in Mersinlik and the Famagusta region among users is evident, with 63% of users using their caravans during the fall season and 38% during the winter. The Kaplica region's caravan living population is driven by a desire for solitude, connection with nature, and psychological rejuvenation. 63% prefer caravan living for these reasons, while 25% seek solitude to escape socially active lives. Caravan owners use sustainable energy sources like solar panels and hot water heating systems, demonstrating their commitment to eco-conscious practices. However, users express concerns about the lack of explicit laws and restrictions for caravan owners, content with the convenience of the area but apprehensive about the future's unpredictability and the potential extinction of the caravan culture in Cyprus. Overall, the caravan living preferences in the Kaplica region highlight the need for sustainable and eco-friendly living options.

In summary, individuals residing in the environment of Mersinlik Caravan Park demonstrate a notable degree of satisfaction, relishing a pleasant and unhurried way of life. The choice to live in a caravan is motivated by both seasonal factors and the want for a psychological and emotional retreat from the pressures of city living.



A survey in the Lapta area revealed that the majority of users are married couples aged 51-60, with 67% and 33% aged 41-50 staying or using the Lapta caravan park. The majority are primary school graduates. The working conditions of users in the Lapta caravan region are 67% working, with 30% being retired. 67% of employed users are technicians, while 33% are civil servants. The majority of users are married couples and predominantly older. In the Mersinlik caravan park area, 100% of users use caravans to escape from the crowded life, as they have different working principles and desire a free and comfortable quality of life with their caravans.

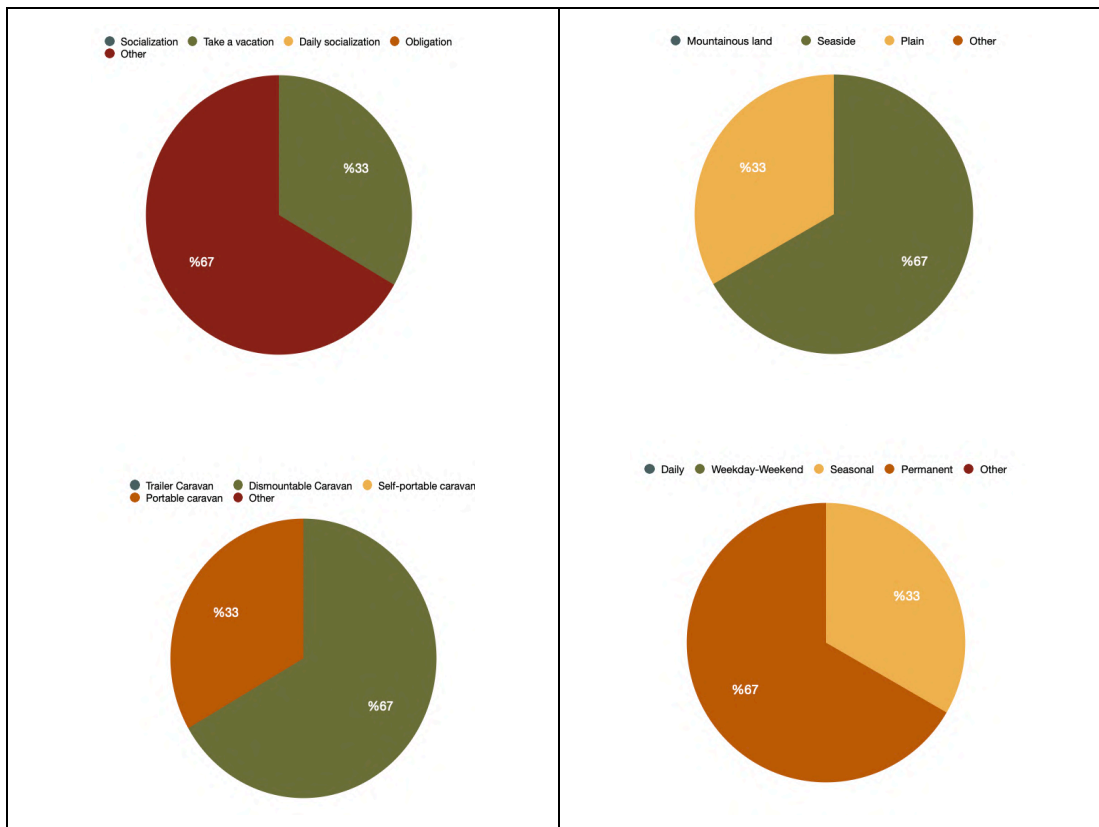


Figure 47. The types of caravans used by users and their frequency of use and the usage periods and regions where caravan enthusiasts engage in activities.

The Mersinlik caravan park in Northern Cyprus has a diverse range of caravan types, with 55% preferring dismantlable, 27% towable, and 18% portable caravans. The

park's users, accounting for 100%, use the park for holiday purposes. The Famagusta region is preferred by 63% of users, while 30% prefer the Karpaz region. The majority of users 88% prefer caravan park areas, with 13% choosing other locations. In the Lapta Caravan Park region, 75% prefer the Karpaz region, 33% prefer the Lefkoşa region, and 75% prefer staying in one place. The majority of users use any available parking spot for lodging, with no preference for caravan park areas. The Mersinlik Caravan Park area has a high usage rate of caravans, with 100% using them in summer. However, 67% use them for socializing, and 33% for family time. The research reveals that frequent caravan users are due to financial difficulties, and residents rarely visit their caravans, leading to their storage or abandonment. The study aims to understand the reasons behind this trend.

4.4 General Evaluation for Selected Locations of Caravans in North Cyprus

The study analyzed survey results from six caravan parks, using interviews to provide a nuanced understanding. A bar chart was used to graphically depict patterns and viewpoints from users in different geographical areas. This approach helps develop a comprehensive picture of the caravanning community, identifying trends and distinctive characteristics in the Karpaz coastal area. The study provides a comprehensive viewpoint for stakeholders, scholars, and enthusiasts interested in understanding caravanning complexities in different geographical contexts.

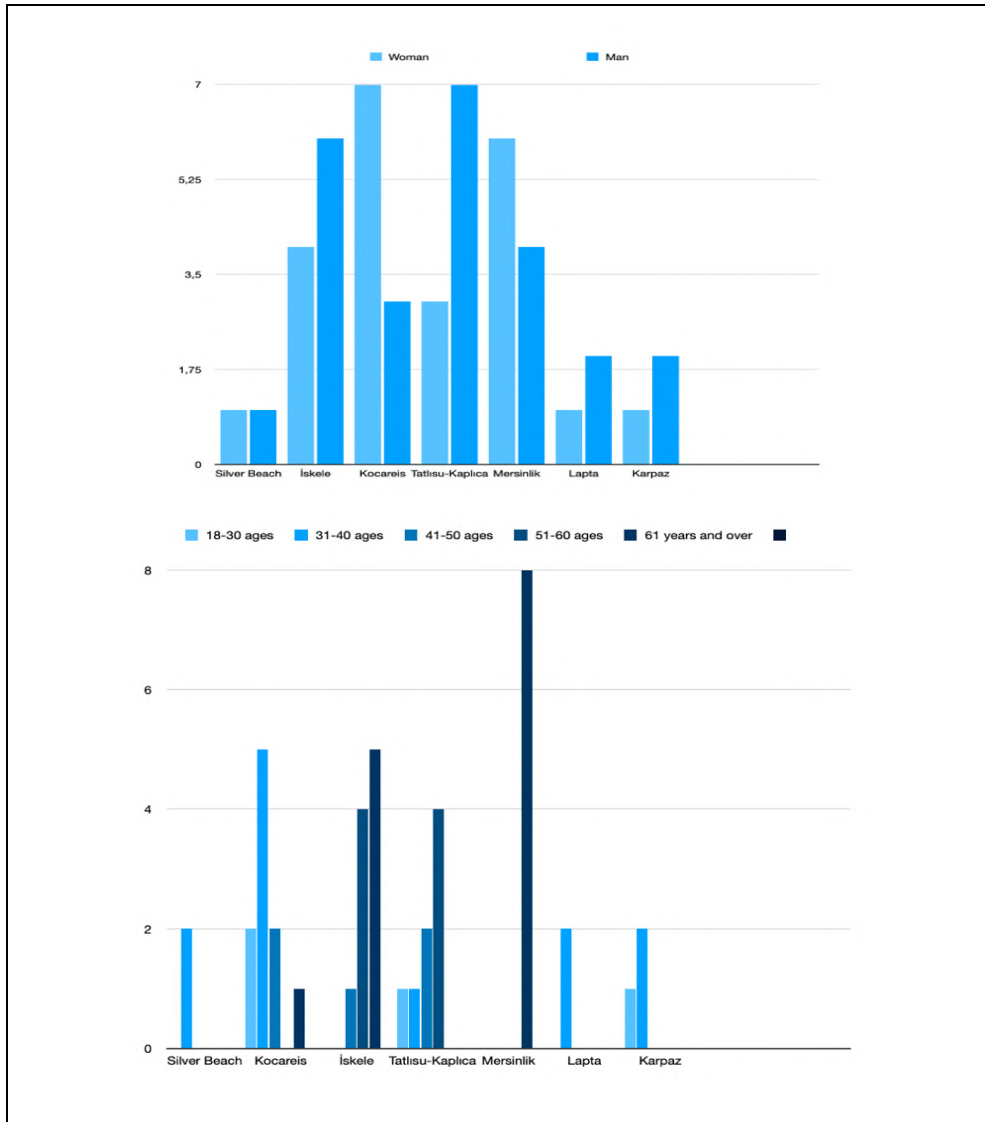


Figure 48. Frequency of use by caravan users and users ages

The analysis of seven caravan parks reveals a predominantly male dominated population, with the İskele region having the highest proportion of women and the Kaplıca region having the highest male ratio. The Mersinlik region has the highest age range, while the Karpaz region has the latest age range. The analysed that all users in the İskele region are married, with the highest number of users staying individually in the Kocareis region. Additionally, the Kocareis region has the highest level of education among users. Caravan owners' choice of caravans and their occupational

situation vary across the regions. Silver Beach residents prefer caravans for environmental socialization and a break from work, while Kocareis residents seek respite from densely populated urban areas. İskele residents prefer caravans for work-related retreats, while Lapta and Karpaz residents use them for natural surroundings and urban escape. dealing with high professional demands. Overall, caravans are a popular choice for caravan owners in these regions.

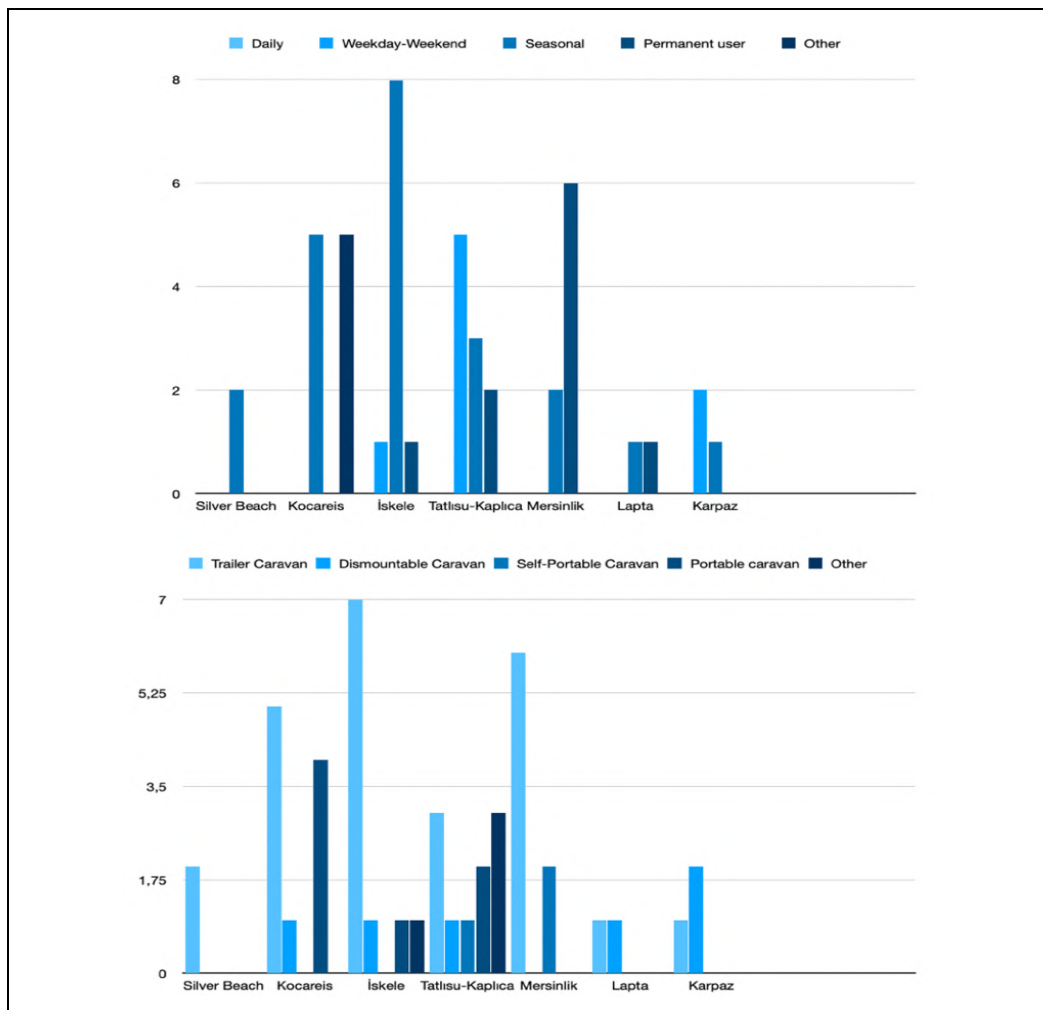


Figure 49. The most used period of life with a caravan and the types of caravans

The offered bar chart has been examined to comprehend the variables impacting the selection of caravans and the usage trends among caravan owners in seven distinct caravan park regions. The data indicates a significant proportion of seasonal users in Silver Beach, Kocareis, and İskele locations, with a particularly high number of İskele users opting for seasonal caravan usage. In Mersinlik and Tatlısu regions, users are mainly permanent inhabitants, regularly utilizing the park space.

Caravan owners in the İskele region, mainly along the seaside, use their caravans seasonally, especially during summer, but may lack legal authorization for their specific region. Users in the Mersinlik and Tatlısu regions are permanent and continuous inhabitants, resulting in high user satisfaction. Most users prefer caravan caravans, which are also widespread in Kocareis and Mersinlik districts. Towable caravans are preferred in the İskele region due to their spacious interior and practicality, especially in areas lacking nearby social or park facilities. These owners prefer towable caravans with substantial storage capacity and superior interior living conditions to maximize contentment in these areas.

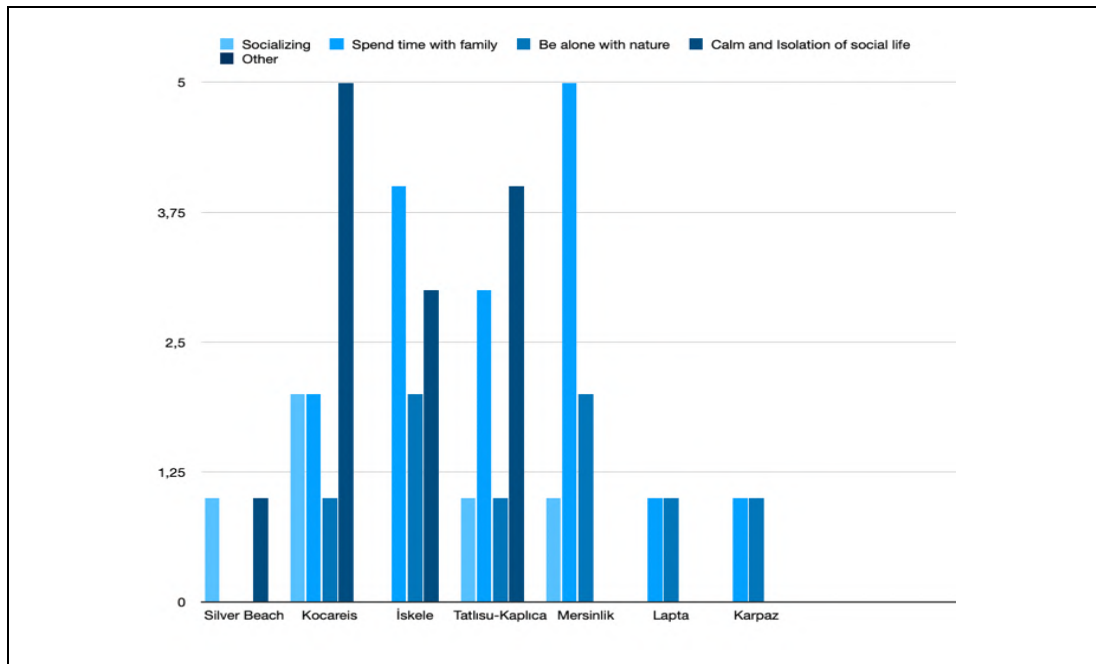


Figure 50. Reasons of users to live in a caravans

The bar graph reveals the factors influencing caravanning decisions and motivations among users in seven different caravan park regions. The Kocareis region attracts a significant number of caravanning users who choose this lifestyle for relaxation and social distancing. In the Iskele region, residents seek serenity and distance from social interactions. The Mersinlik region is preferred for spending quality time with families. Overall, caravan park locations are chosen for their ability to provide peace, solitude, and detachment from social interactions, while also allowing users to enjoy quality time with their families in the natural surroundings.

4.5 Spatial Organization of Caravans Indoor Environment in North Cyprus

In the Turkish Republic of Northern Cyprus, there are many caravan parks that are mainly situated in coastal regions and privately owned places. The spatial arrangement of caravans in Northern Cyprus might differ from one camp to another. Moreover, the

availability of essential infrastructure and services in these caravan parks is frequently inadequate. In section 4.2 of the thesis, an analysis is conducted on the spatial arrangement of caravans inside the given caravan park regions. Caravans are mobile dwellings that are closely connected to the natural environment. Hence, the utilization of caravans indoors may be lower compared to outdoor usage, contingent upon the users' choices, owing to their direct integration with the external surroundings. Following the investigations, some caravan users have resolved their living requirements by enclosing partially exposed spaces adjacent to their caravans.

A site study was done in six distinct caravan park regions, followed by the administration of a questionnaire to caravan users. The poll encompassed inquiries pertaining to the interior, partially accessible, and fully accessible areas. Subsequent analyses were performed using user replies to get insights into the various types of caravans and their usage patterns, specifically in relation to the geographical locations of the users.

- **SILVER BEACH CARAVAN PARK**



Figure 51. Silver Beach towable caravan interior organization (Photos Taken by Author, 2023)

Towed caravans are popular in Cyprus due to their spaciousness and modest accommodations, with a double bed across the entire width. A survey in the Silver Beach area revealed that users mostly stay during the day and spend time in semi-outdoor areas from midday until night, where the interior space restricts them. However, users avoid these spaces due to the decision of Famagusta Municipality to displace caravan dwellers. The indoor area serves as the primary space for relaxation and socializing, with ample storage and lighting provided by battery-operated lights. Users report using the interior space for socializing and warming, with 67% using it for socializing and 33% for heating. The interior space is used less than an hour, and users appreciate the ample space for comfortable movement.

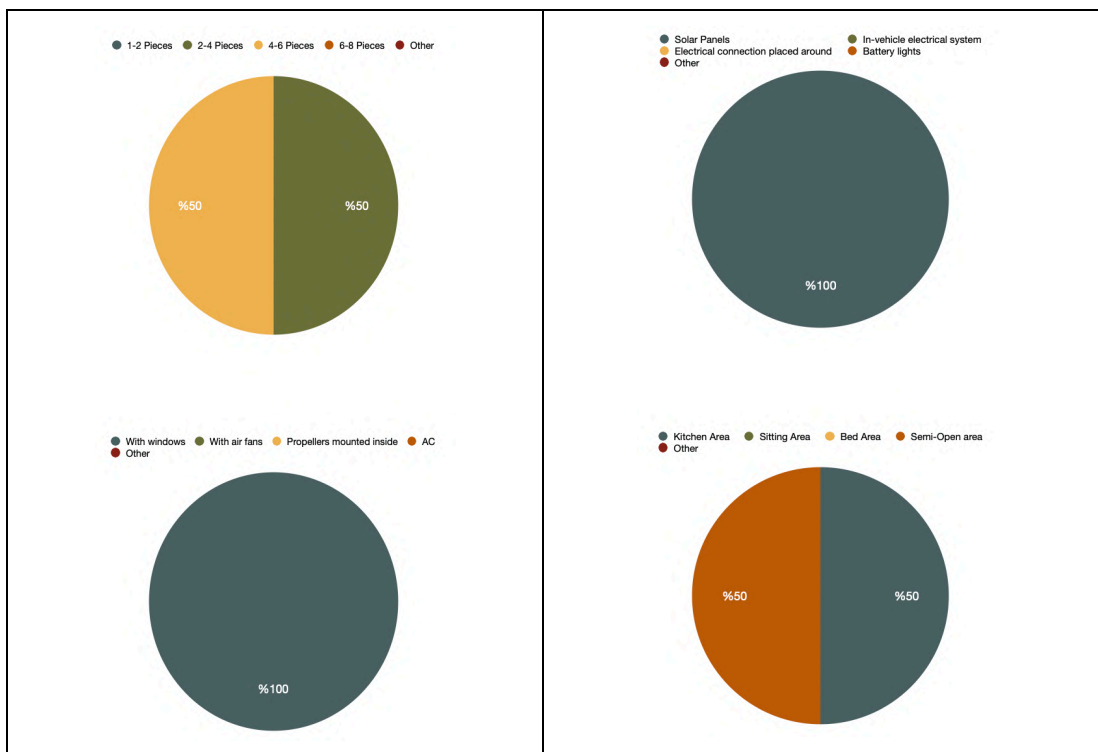


Figure 52. Caravan interior circulation and number of windows and indoor lighting system and the area that users use most in their caravans

A survey in the Silver Beach region revealed that while half of caravans have 4-6 windows, they lack ventilation systems, making them susceptible to hot weather. Users reported dissatisfaction with interior comfort and indoor living. However, all caravan users use solar panels, promoting sustainability and environmental preservation. Solar panels effectively address electricity-related concerns due to the bright Northern Cyprus climate. Half of visitors use partially exposed areas, while the remaining half use the culinary facilities in their caravans.

A survey at the Silver Beach caravan park revealed that 50% of caravan users allocate 1-6 hours to their kitchen, while the other 50% spend less than 1 hour. The majority of users have a single storage room, with half having one to four. This is due to prolonged periods spent inside the caravan, leading to dissatisfaction with the storage capacity. Wood is commonly used in the cooking area, with half using electric cookers and the other half using microwaves. Solar panels have reduced electricity-related issues, allowing easy use of electric appliances for cooking or heating. The living area in the Silver Beach region is occupied by 2-3 individuals, and dwelling spaces may not serve multiple purposes due to limited facilities and seating areas. Additionally, living spaces may lack comfort and suitability for extended occupancy.

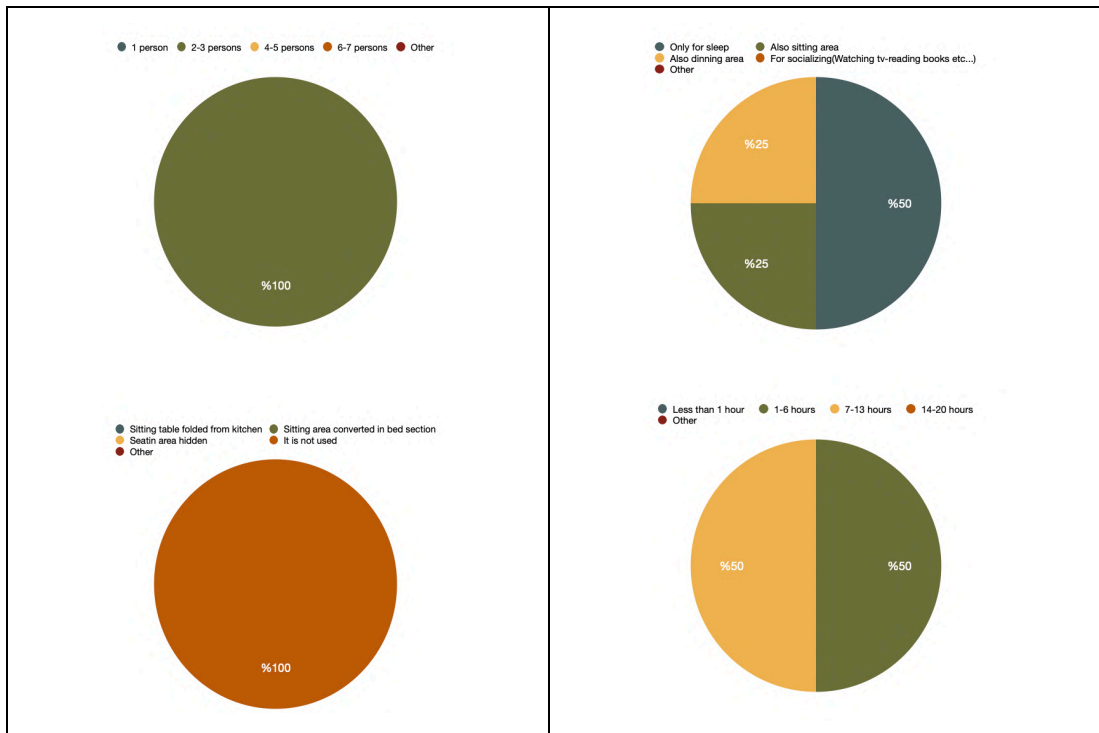


Figure 53. Use of the seating area for different functions and the number of people using the seating area and the time allocated to the bedroom and the use of the bed area

A survey conducted in the Silver Beach caravan park area revealed that the seating area in caravans is used by 2-3 users, but not many due to its limited range of functions. The inside seating area is also insufficiently used, with 50% of users using it for 7-13 hours, while the remaining 50% use it for 1-6 hours. The sleeping area is used for various purposes, with 50% exclusively for sleeping and 25% for both resting and seating. The sleeping room is the most used space for resting, sleeping, and socializing during the day, according to user reports. The limited use of the sleeping area and the ongoing issue with the inside seating area in caravans are causing concerns among users.

A survey conducted in the Silver Beach region revealed that caravan users' sleeping rooms can serve multiple purposes, with 50% using them for storage and 50% for seating. Half of the beds can be converted into seating sofas or folding beds, with users generally valuing these versatile spaces. The sleeping area also accommodates varied usage circumstances, with 50% storing personal belongings or clothes in the kitchen or cabinets, and 50% in the sleeping area.

The toilet area is addressed both indoors and outdoors, with 50% resolving it indoors due to full or absent waste water tanks in caravans. If an underground waste water drain is not available, the toilet must be resolved inside the caravan. Overall, the multifunctionality of caravan sleeping areas caters to varied usage circumstances and is highly valued by users.

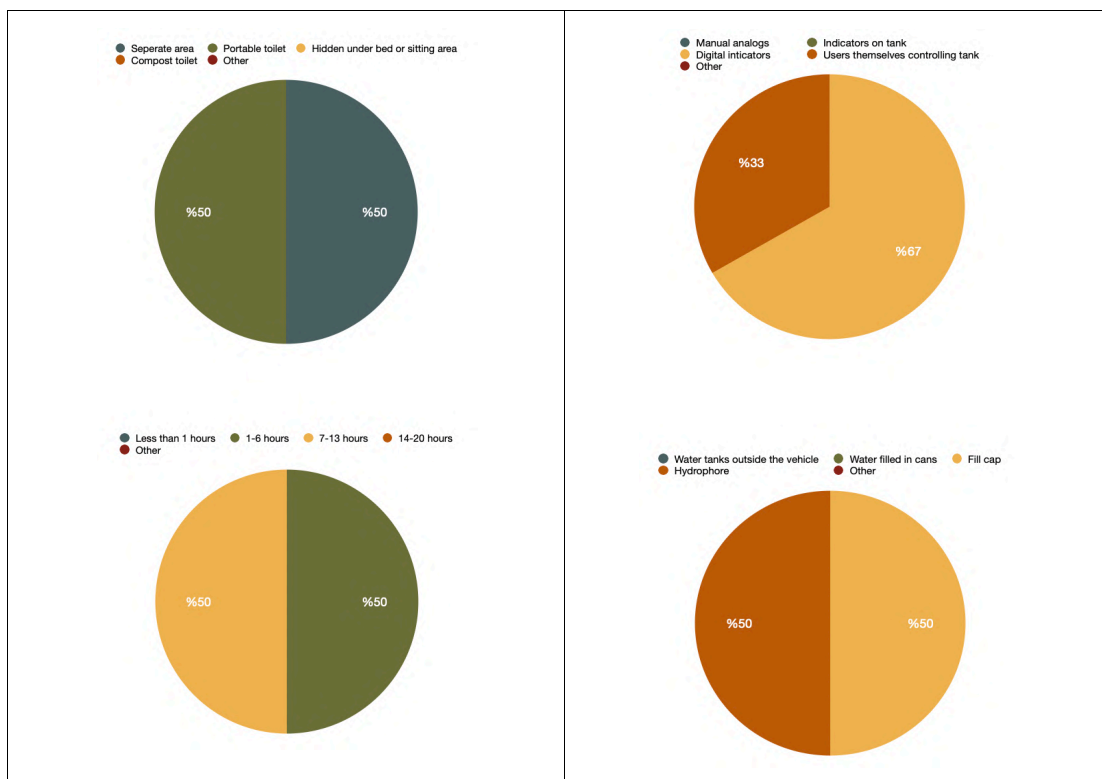


Figure 54. Type of toilet use and how often used in toilet and cold and hot water control and the use of this water in the caravan

A survey conducted in the Silver Beach region found that 50% of caravan users use dedicated toilets, while the remaining 50% use portable toilets. The toilet usage is divided, with 50% using them for 7-13 hours daily for showering and grooming, and the remaining 50% for less than an hour for basic needs. Additionally, 50% of caravan users obtain clean and dirty water through filling water containers, while the remaining 50% use a hydrofor system. 67% of users have a digital display indicating clean and dirty water levels, while 33% manually inspect and monitor the levels. The survey highlights the need for improved sanitation and hygiene practices in the caravan park region.

In summary, An analysis of caravan organization in the İskele region, as explained in the survey sections, reveals a clear inclination towards towed caravans due to their larger interior space compared to motorhomes. Caravan accommodations usually have a simple design with a double bed, and guests often make use of partially outside spaces because of limited space. However, Famagusta Municipality's decisions have limited the use of these areas. Indoor rooms in the Silver Beach region are primarily used for leisure and social interaction, with windows and fans providing effective ventilation. Users in the area often use these spaces during midday and evening, varying their opinions on their practicality. Some find them boring, while others find them beneficial for sleep and relaxation. Solar panels are widely used, contributing to sustainability. However, there are concerns about ventilation issues in certain caravans. Kitchens are designated for cooking, with users having different preferences for electric cookers or microwaves. Storage capacity in caravans is limited, and wood is often used instead of solar panels. Living areas vary in duration, and seating is

limited. Sleeping rooms are often used for various purposes, and toilet facilities vary, with some users resorting to outdoor facilities. The use of clean and dirty water varies, with digital displays indicating water levels for some users. Overall, the survey provides valuable insights into the preferences, difficulties, and usage patterns of caravan users in the İskele region.

- **KOCAREİS CARAVAN PARK AREA**

In Kocareis park area, the findings from the questionnaire and field analyses reveal that the users who use the private land usually do so seasonally, while the caravan dwellers in the park are defined as permanent users.



Figure 55. Semi-open space used as a socialising area in private preparty (Photos Taken by Author, 2023)

The survey reveals that caravan users in Northern Cyprus primarily use their caravans for sleeping, resting, socializing, and kitchen purposes, with 80% experiencing restrictions in the morning and evening hours. In contrast, permanent caravan residents in the Kocareis park area primarily enclose semi-open spaces, primarily using their caravans as transportation. The research found that 70% of participants use their caravans for eating and resting, 10% for cold protection, and 20% for other activities. The interior usage time is 40% less than 1 hour, 40% between 1-6 hours, and 20% between 7-13 hours. The majority of users use the interior for dining and resting, and some use it to cool down due to the hot climate. However, a small portion still uses the interior for cooling off during hot weather. Users in the Kocareis parking area expressed satisfaction with their caravan life, but were removed from the area by municipalities.

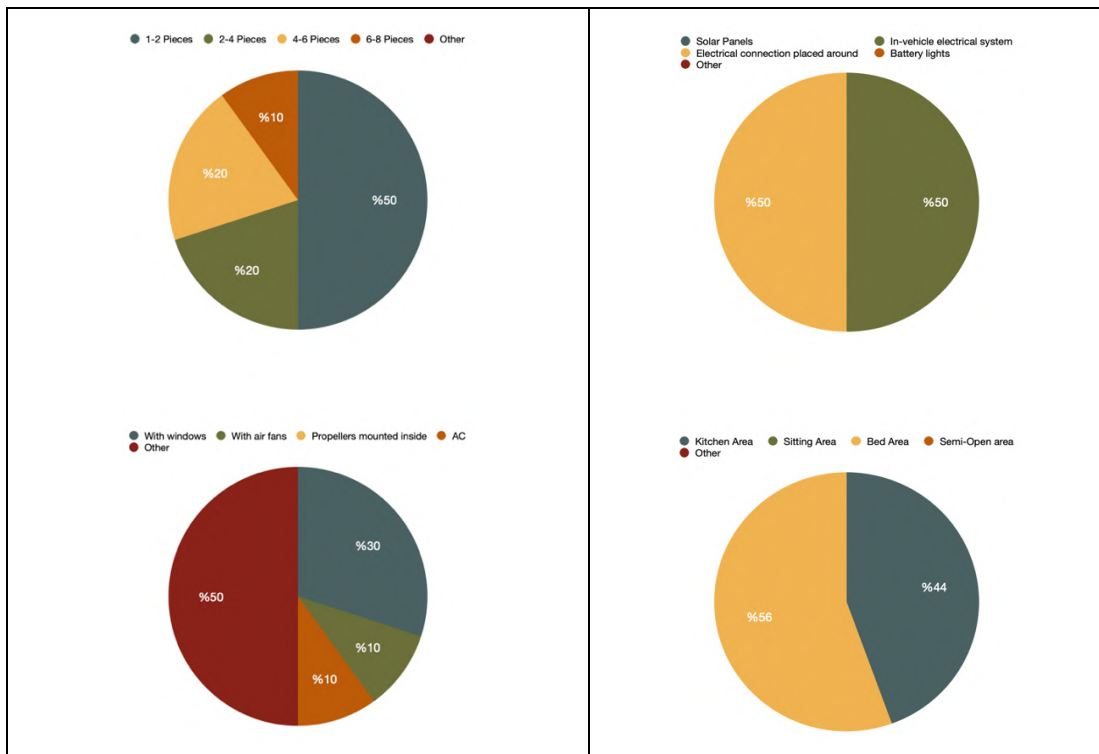


Figure 56. Caravan interior circulation and number of windows and indoor lighting system and the area that users use most in their caravans

A survey in the Kocareis region revealed that 50% of caravans have 1-2 window areas, 20% have 2-4 and 4-6 windows, and 10% use 6-8 windows. In the Kocareis caravan park area, 30% use windows and 10% use fans and air conditioners. Users generally use indoor space in hot weather, and 50% use solar panels. 50% connect their caravan's electrical system to the surrounding infrastructure. Half prefer sustainable electrical systems, while the other half face difficulties. The lack of a dedicated electrical system in the parks causes discomfort for users. 56% use the sleeping area, while 44% prefer the kitchen area. The research in Kocareis caravan park reveals that 60% of users use the kitchen area daily for 1-6 hours, with 40% spending less than 1 hour. Most users have 5-8 or 1-4 storage areas, with 10% having at least one cooking space. Cooking preferences vary, with 50% favoring gas stoves, 40% using alternative methods, and 10% using electric stoves. Users also express dissatisfaction with storage capacity and the need for cabinets or additional rooms for confidential storage.

A survey in the Kocareis region found that 30% dedicate 1-6 hours per day to their living environments, while 20% spend 7-13 hours, and 10% spend less than 1 hour. The remaining 40% use the room intermittently. 90% of respondents use the seating area in caravans for various purposes, with some enjoying the interior seating area while others express discontent due to the climatic conditions of Cyprus and the conversion of partially open caravan spaces into expansive seating rooms through enclosures.

The sleeping area is the most used space in the Kocareis park area, serving rest, sleep, socializing, and seating. The survey emphasizes the sleeping area's multifunctionality

and its ability to cater to various usage scenarios, resulting in high satisfaction with the caravan's interior space.

A survey in Kocareis caravan park found that 90% of users store personal belongings or clothes in storage areas, with 10% in bags or under the seating area. Toilet facilities are resolved by 60% indoors, while 40% outdoors. Half use compost toilets, while the other half use separate facilities. Waste disposal is typically done in nature, with 70% using the toilet for basic needs and 30% spending 1-6 hours daily. 50% lack hot and cold water solutions, expecting park facilities to provide them. Waste management is mainly through cassette compartments, with 22% using storage space under the caravan. Compost toilets and macerator systems are used by 11%. Clean water is sourced through hydrofor systems and containers.

The Kocareis park region and its caravan occupants reveal diverse lifestyle choices and preferences. Seasonal and permanent users have distinct ways of living, with the interior space primarily serving for dining and resting, while also incorporating cooling mechanisms. Energy requirements are met through solar panels or existing electrical infrastructure, demonstrating a preference for sustainability. The kitchen area is centrally located, with gas stoves addressing power availability issues. The sleeping area is crucial for multiple activities, such as resting, sleeping, socializing, and storage. However, some users experience difficulties due to climatic conditions and partially open sections. The study also highlights concerns about storage and additional amenities in caravans, suggesting potential areas for improvement in caravan design. Users' preferences for indoor toilet facilities and waste disposal methods are also

discussed. Monitoring storage capacity and varied water and waste management strategies is crucial. The study also highlights the dependence on park amenities for hot and cold water solutions, highlighting the impact of external factors like climate on lifestyle preferences. Improving power, storage, and water management can enhance the overall experience for caravan users, promoting a sustainable and comfortable lifestyle in park areas.

- **ÍSKELE CARAVAN AREA**

In the caravan area of Iskele, findings from the conducted survey and field analysis indicate that users utilizing the land do not have a legal right to it, and the land is neither private nor part of a municipal park area. Consequently, municipalities have taken measures to tow away or lock away the caravans of individuals found on the land.



Figure 57. Semi-open space used as a socialising area and close with tent and kitchen organisation and storage areas in a caravan (Photos Taken by Author, 2023)

A survey in the İskele caravan region found that 80% of interior users experience restrictions, with 70% using them at night and 30% preferring evening hours. The majority use semi-open spaces, indicating a lack of dedicated social or recreational areas. Users actively engage with all functions and features of their caravans, maximizing the use of both interior and semi-open spaces for various needs. The majority use the interior for dining and resting, while the open surroundings encourage them to enjoy spending time in semi-open and open areas.

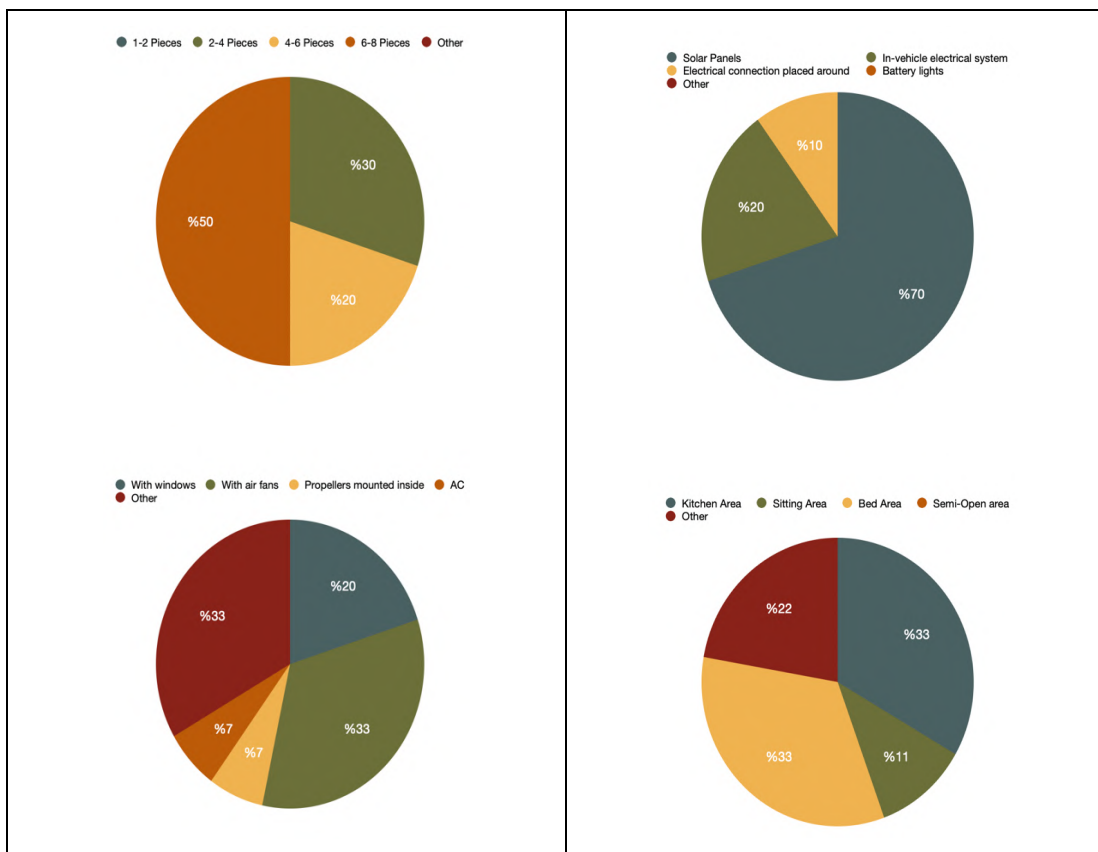


Figure 58. Caravan interior circulation and number of windows and indoor lighting system and the area that users use most in their caravans

A survey in the İskele Caravan Area found that 50% of caravans have 6-8 windows, 30% have 2-4 windows, and 20% have 4-6 windows. Interior circulation is achieved

through fans or air conditioners. 70% of users use solar panels for their electrical systems, while 20% rely on vehicle battery support and 10% source electricity from the environment. Over half prefer sustainable electrical systems, while others use batteries inside the vehicle. Interior usage is primarily for kitchen and sleeping areas, with 22% using various functionalities and 11% using the seating area. Users express satisfaction with their caravans' interior spaces, fulfilling their basic needs. A towed caravan, with a limited indoor space, is used for kitchen and socialization. However, users feel bored indoors and prefer to spread out into semi-open and open areas. Wastewater is stored beneath the caravan and emptied by the user. In the research conducted with users in the İskele Caravan Area, it was indicated that 57% of users spend less than 1 hour in the kitchen area, while 43% use it for 7-13 hours only for basic needs. Additionally, in the kitchen section, it was noted that 40% of meals are prepared with a gas stove, 30% with an electric stove, 20% with a mini stove, and 10% using different methods. Users in the kitchen area engage in various cooking practices. Some users make use of electricity produced by solar panels for electric stoves, while others use gas stoves and cylinders.



Figure 59. The kitchen area, which is insufficient in the interior, is solved in the open area (Photos Taken by Author, 2023)

The İskele Caravan Area in Turkey has a high percentage of caravan users who have additional storage space within their caravans, with 30% having one, 20% having multiple, and 10% potentially having more. This is due to the terrain and lack of nearby facilities. A survey revealed that 45% of users use a faucet, 27% use a kitchen sink without a cover, and 9% use a sink with a cover or other sink varieties. The interior seating area is 70% not used for different functional purposes, and 30% is used for various functions. Users engage with the seating area at different time intervals, with 40% using it for 1-6 hours, 20% for less than 1 hour, and 20% for 7-13 hours. The seating area is versatile, accommodating a wide range of users, with 60% converting into bed areas, 18% being storage spaces, and 9% being a kitchen table.

The İskele caravan area's users use their sleeping areas for various purposes, with 40% using them for different periods and 20% for less than 1 hour. The sleeping area is used for various purposes, including sleeping, sitting, socializing, and dining. Bed types vary, with 50% using fixed beds, 40% using folded beds, and 10% using versatile beds. The sleeping area is the most used area in the caravan, serving various purposes throughout the day. Users in Kocareis park use the sleeping area for resting, sleeping, and socializing, as well as seating. The research highlights the versatility of sleeping spaces in caravans for various purposes.

The research conducted in the İskele caravan area revealed that 50% of users store their toiletries in the bed area, 20% in cabins and kitchen areas, and 30% in the living area. The majority of users use the toilet indoors, with 89% using it indoors and 11% outdoors. The majority use a separate area for toilets, with 40% using a portable toilet.

The majority of users use their toilets for less than 1 hour and between 1-6 hours. The majority of hot and cold water usage is in the water tanks outside the vehicle, 20% in the water booster system, 20% in the canisters, and 20% in the vehicle's storage areas. The fullness of water tanks can be determined by indicators on the tanks, users themselves, and manual analogs. In the Pier area, hot and cold water is provided by solar panels, heaters, electric combi boilers, and other methods. The hot climate makes water temperatures easily warm, and 90% of toilet waste is stored in the waste storage area under the caravan.

The Iskele region's caravan users often occupy semi-open spaces covered with a canopy for social purposes, while indoor toilet and dining needs are met. The survey and site analysis reveal unique challenges faced by caravan users, such as lack of formal land rights and municipal actions against forbidden occupation. The main purpose of caravan interiors is dining and resting, and consumers express contentment with these areas despite constraints. The research emphasizes the importance of semi-open spaces in the area, as there are fewer specialized social or recreational facilities nearby. Users' creativity is evident in using solar panels for electricity generation, water and trash storage, and adaptive techniques to compensate for the lack of municipal utilities.

The users of the Iskele Caravan Area confront issues regarding land occupation, legal restrictions, and limited municipal facilities. However, they overcome these issues by ingeniously modifying their caravans to fulfill various requirements. The study highlights the significance of comprehending user behaviors and preferences while

building and organizing caravan spaces, with a particular focus on the necessity of providing supportive infrastructure and amenities to improve the entire experience for caravan enthusiasts in the İskele region.

- **TATLISU – KAPLICA CARAVAN PARK**

In the caravan area of Tatlısu, findings from the conducted survey and field analysis reveal that users of the land can be categorized into those associated with the positive park area and those associated with the negative park area. The positive caravan area is located in the northern section, while the negative park area is situated in the southern section.

Each caravan user in the negative park area has created their own space. They have enclosed semi-open and open areas individually to establish a living space. Users generally do not use the indoor space of the caravan; instead, the caravan interior is primarily utilized as storage space. In figure 60, the semi-open area of the caravan is enclosed, the rear section is closed off, and a toilet solution is implemented in this space.



Figure 60. Closing the semi-open area and transforming it into a living space and cooker and cover system in the caravan but not in use (Photos Taken by Author, 2023)

The survey conducted with users in the Tatlısu caravan region reveals important information about the preferences and usage patterns of caravan interiors. In particular, 70% of caravan users state that the interior restricts them, while 30% stay comfortably indoors. In addition, 78% use the interior of the caravan at night, while 11% use it at noon and evening. While 67% use the indoor space for eating and relaxing, 11% use it for socializing, hot weather conditions and other factors. 50% is used between 7-13 hours, 20% is used less than 1 hour, and 10% is used between 1-6 hours and 14-20 hours.

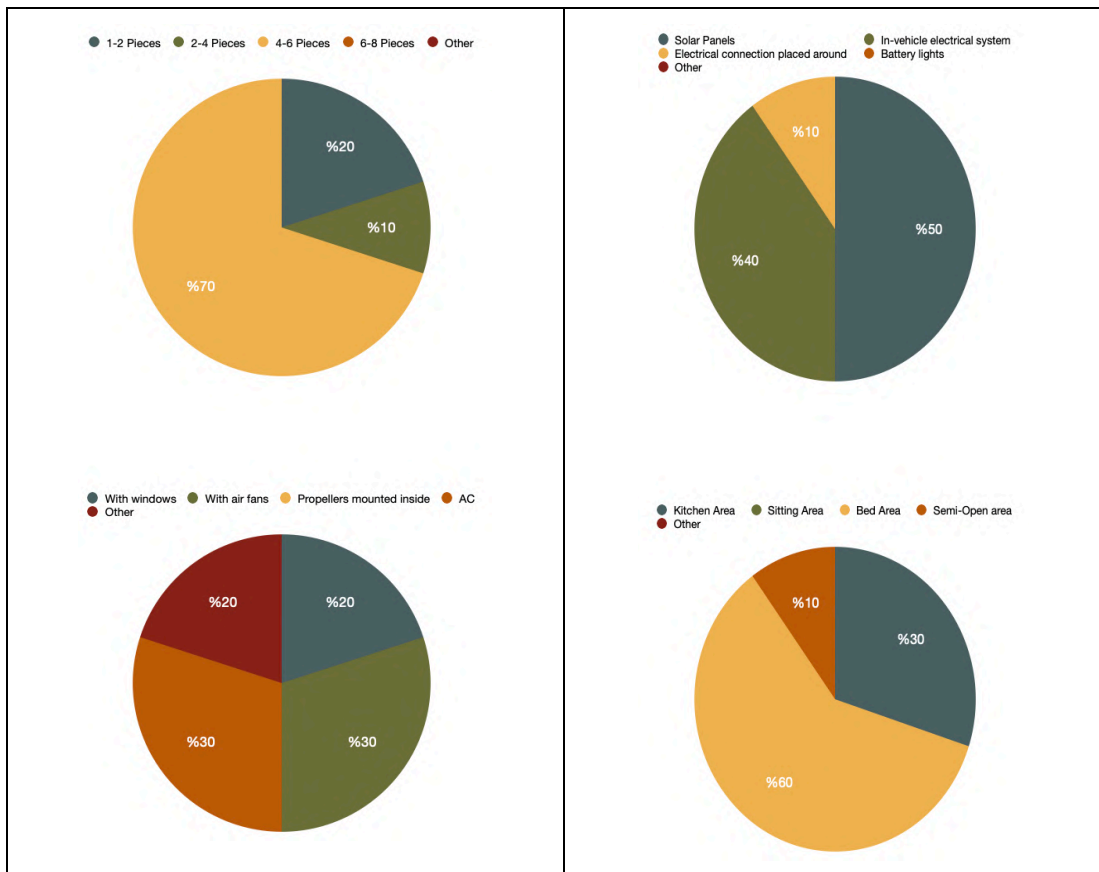


Figure 61. Caravan interior circulation and number of windows and indoor lighting system and the area that users use most in their caravans

According to the survey conducted with users in the Tatlısu Caravan region, 30% of the caravans use air conditioning as circulation, while 30% are fans and 20% are windows. While there are 70% 4-6 glass areas in the interior of the caravan, 20% have 1-2 glass areas and 10% have 2-4 glass areas. Electricity needs in caravans are met 50% by solar panels, 40% by batteries and 10% by electrical systems located in the surrounding area. The most used area in the interior is the bedroom area with 60%, the kitchen area is 30%, and the semi-open areas are 10%. Circulation is provided in different ways in the interior of the caravan. As seen in the analysis, natural circulation is provided when air conditioners and fans are used. Electricity needs are provided by solar panels and batteries, so half of the users use sustainable electricity systems.

The research conducted in the Tatlısu-Kaplıca Caravan parking area revealed that 50% of users use the kitchen area between 1-6 hours, 20% use it for less than 1 hour, and 10% use it for 7-13 hours. The kitchen area has warehouses, with 40% being 1-4 units, 30% being 5-8 units, and 20% being other. The survey also found that seating areas can be used for different functions, with 70% of users agreeing and 30% saying they cannot. The seating area is used for 1-6 hours, with 20% using it for 14-20 hours and at different intervals. 10% is used for 7-13 hours or less than 1 hour. The seating area is versatile, with 90% being converted into a bed area and 10% being converted into a kitchen table. The space is often used by a considerable number of users due to its versatility.

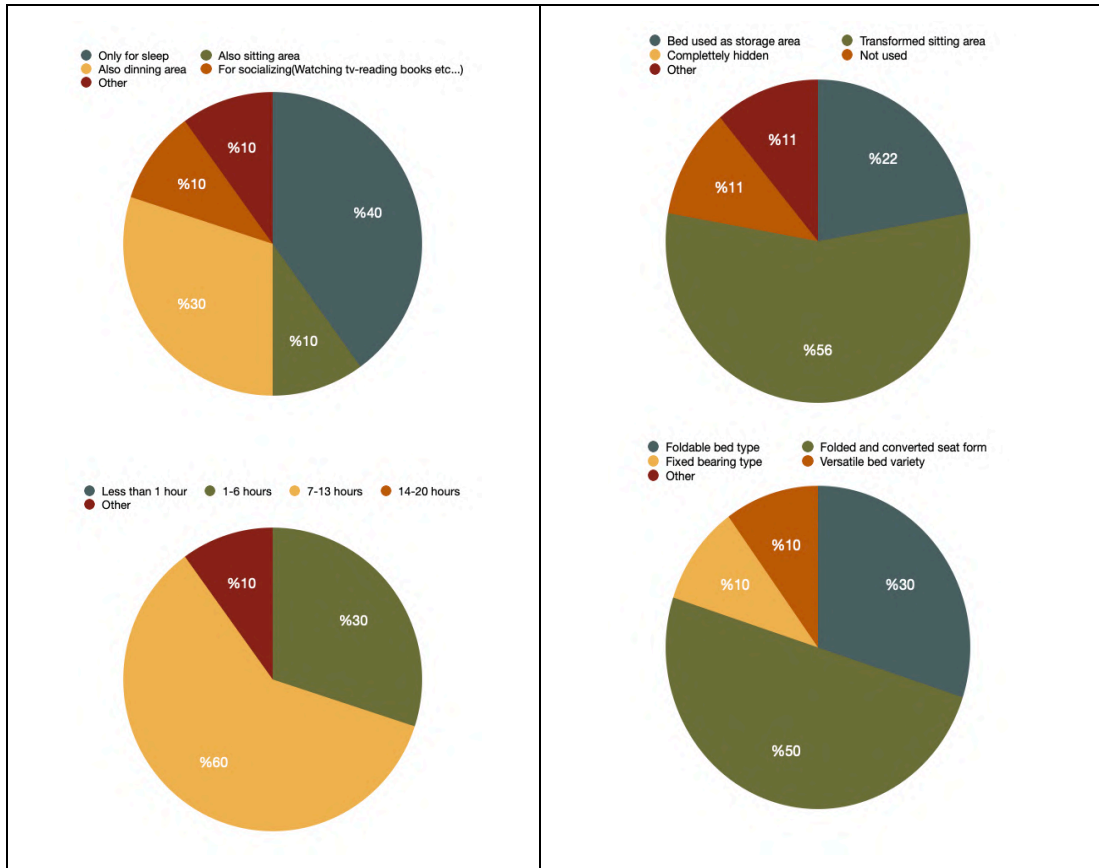


Figure 62. The time allocated to the bedroom and the use of the bed area bu and the ability to transform the bed into different functions and use it as a storage space

The study reveals that 60% of users in the Tatlısu-Kaplıca caravan region use their sleeping area for 7-13 hours, with 30% using it for 1-6 hours and 10% for different periods. The sleeping area serves various purposes, including sleeping, dining, socializing, sitting, and various functions. Bed types vary, with 50% converting into a sitting area, 30% being fixed caravan types, and 10% being foldable. The sleeping area is the most used area in the Kaplıca caravan parking area, serving various purposes throughout the day. Storage spaces are divided into 30% bed cupboards, 30% cabin areas, and 20% bag and luggage areas. Toilet facilities are primarily outdoor, with 50% using outdoor solutions, 40% indoor, and 10% using portable toilets.

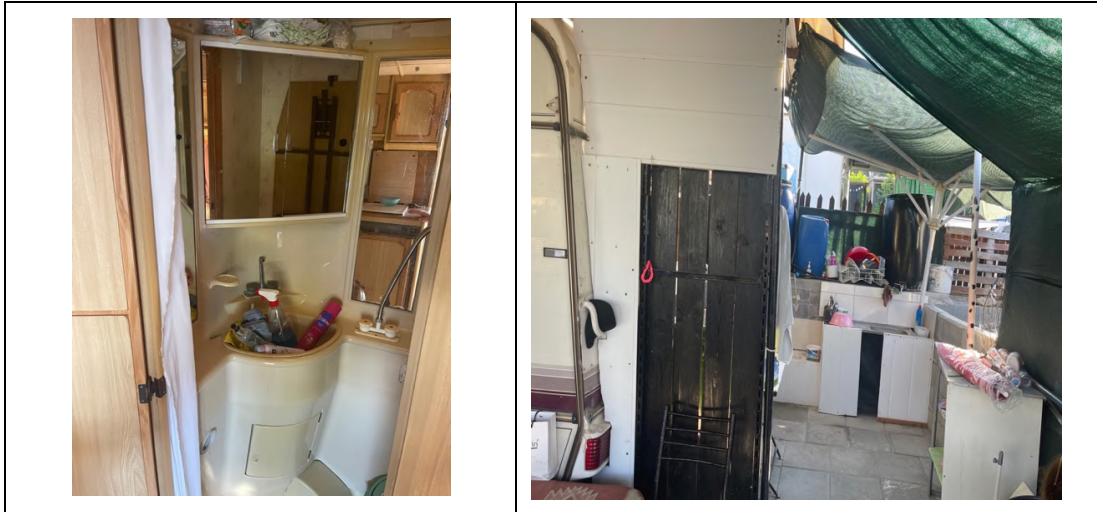


Figure 63. Shower and toilet area analysed in semi-open area (Photos Taken by Author, 2023)

In the southern section's negative caravan park area in Tatlısu, users do not have infrastructure systems such as water storage areas and electrical systems. Users have independently implemented solar electricity systems or stored clean water using their own resources. The land they occupy is neither municipal nor private.

The research reveals that 50% of hot and cold water usage in hot spring caravans is in water tanks outside the vehicle, with 40% stored in canisters. The fullness of water tanks is checked 30% by users and 20% manually. In spa area caravans, 60% use heaters, 10% use electric combi boilers, and 10% have no hot-cold water solution. The hot climate can cause water temperature to rise. 80% of toilet waste is disposed of using various methods, with 10% in waste storage areas under the caravan and 10% in water storage areas.

In summary, the research carried out in the Tatlısu-Kaplıca caravan region emphasizes the unique attributes and behaviors of users in both the favorable and unfavorable

sections of the park. Residents in the southern part of the negative park have each constructed their own unique living spaces by enclosing partially open and fully open areas, with little emphasis on utilizing the interior of the caravan except for storage. The toilet sections within the caravan are converted into storage spaces, as shown in Figure 63. This involves enclosing semi-open parts, closing off the rear section, and setting up a toilet solution. The survey reveals important insights into the preferences and usage patterns of caravan interiors in the Tatlısu region. Significantly, 70% of users experience limitations within the interior of the caravan, mostly employing it during nighttime (78%) for diverse activities, with 67% using it for dining and unwinding. The study also demonstrates several approaches to generating interior circulation, with 30% employing air conditioning, 30% depending on fans, and 20% utilizing windows. Solar panels make a substantial contribution, fulfilling 50% of the electrical requirements, while batteries account for 40 percentage.

The research explores kitchen, seating, and sleeping areas in caravan parks. The kitchen has a variety of storage options, with 40% having 1-4 units and 30% having 5-8 units. Seating areas are adaptable, with 90% converting into sleeping areas. Sleeping areas are versatile, as users spend time for various purposes. However, the southern region lacks essential infrastructure systems like water storage and electricity, leading to autonomous installation of solar power systems and potable water storage. Hot and cold water usage varies, with 60% using heaters and 10% using electric combi boilers. The study reveals that waste disposal strategies in the toilet area vary significantly, with 80% using different methods and 10% using storage facilities beneath the caravan

or waste water storage areas. This highlights the diverse customs and living styles within the Tatlısu-Kaplıca caravan community.

- **MERSINLIK CARAVAN PARK**

In the caravan area of Mersinlik, findings from the conducted survey and field analysis reveal that users of the land generally utilize it as a positive park area, equipped with separate toilet facilities and security measures. In the caravan area of Mersinlik, findings from the conducted survey and field analysis reveal that users of the land generally utilize it as a positive park area, equipped with separate toilet facilities and security measures.

The survey conducted with users in the Mersinlik caravan region reveals important information about the preferences and usage patterns of caravan interiors. In particular, all of the caravan users stated that the interior space of the caravans did not restrict them. It is understood that caravan users are satisfied with the interior space. It was reported that 63% of the caravan users use the interior at different times of the day, 25% use it in the evening, and 13% use the interior at night. For caravan users, 63% of the interior usage purposes are for different purposes, 25% for benefiting from the hot air flow, 13% for eating and resting. Indoor usage time is 63% between 1-6 hours, 25% between 7-13 hours and 13% in other hours.

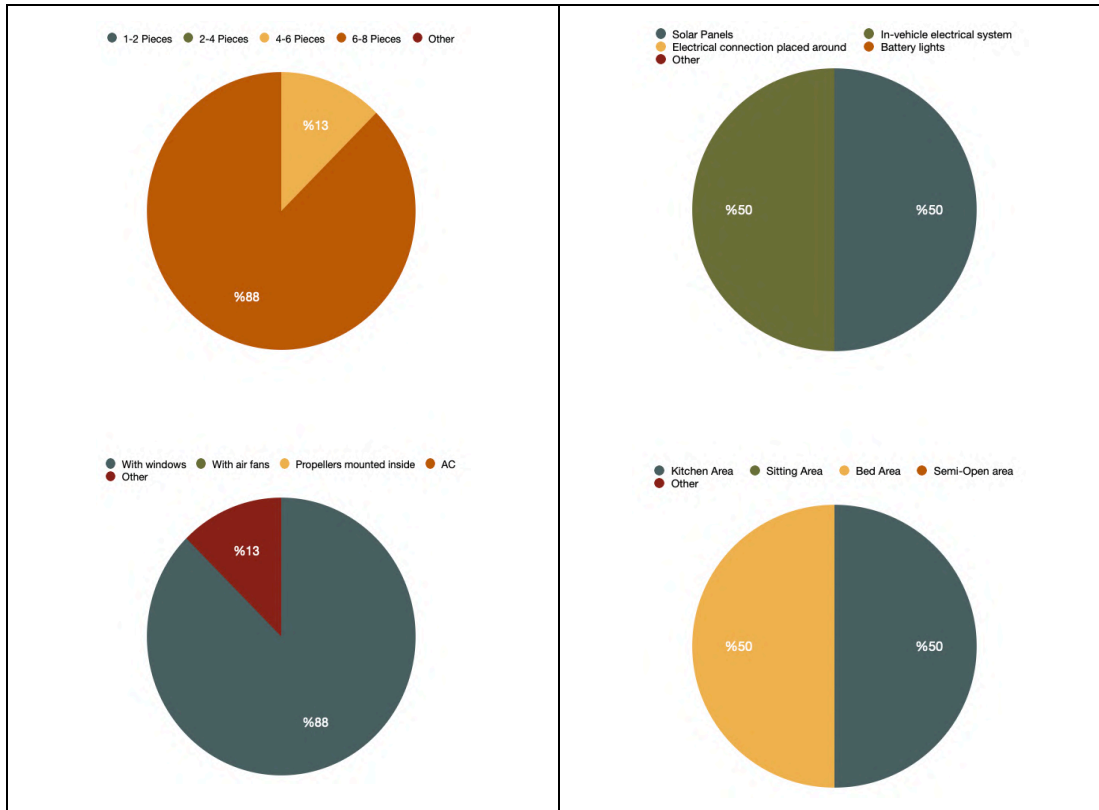


Figure 64. Caravan interior circulation and number of windows and indoor lighting system and the area that users use most in their caravans

The Mersinlik Caravan region's research shows that 88% of caravans use windows for circulation, with 13% indicating otherwise. The interior of caravans has 6-8 glass areas, with solar panels and batteries providing 50% of electricity needs. Half of caravanners use sustainable electricity systems, but battery users face issues with the electrical system and potential power shortages. The bedroom and kitchen areas are the most used interior areas, with 50% each. The interior is primarily used for basic needs, contributing to the region's environmental impact.

The research at Mersinlik Caravan Park found that 50% of users spend between 7 and 13 hours using the caravan, with 13% using it for 1-6 hours and 38% using it at different intervals. The kitchen area has 88% storage space, with 9-11 storage areas

and 13% having 5-8 storage areas. 88% of meals are cooked on gas stoves, while 13% are on electric. Users with electricity issues use fewer electrical appliances in their caravans.

According to the research conducted with users in the Mersinlik Caravan Region, seating areas can be used for different functions. While users can use 88% of the seating areas for different functions, 13% are not used for different functions. While 57% of the users' seating areas are used for less than 1 hour, 43% are used between 1-6 hours.

According to the survey conducted among users in the Mersinlik caravan region, it was determined that 50% of the participants used the seating area in their caravans for 4-5 people, and 50% used the seating area for 6-7 people. Due to its flexible functionality, the seating area does not place a cap on the number of users who can use the area. Offering a wide range of functions, 63% of the seating areas are not used for different functions, and 38% of the seating area turns into a bed area. There are frequently many people using the seating area in the Mersinlik caravan area.

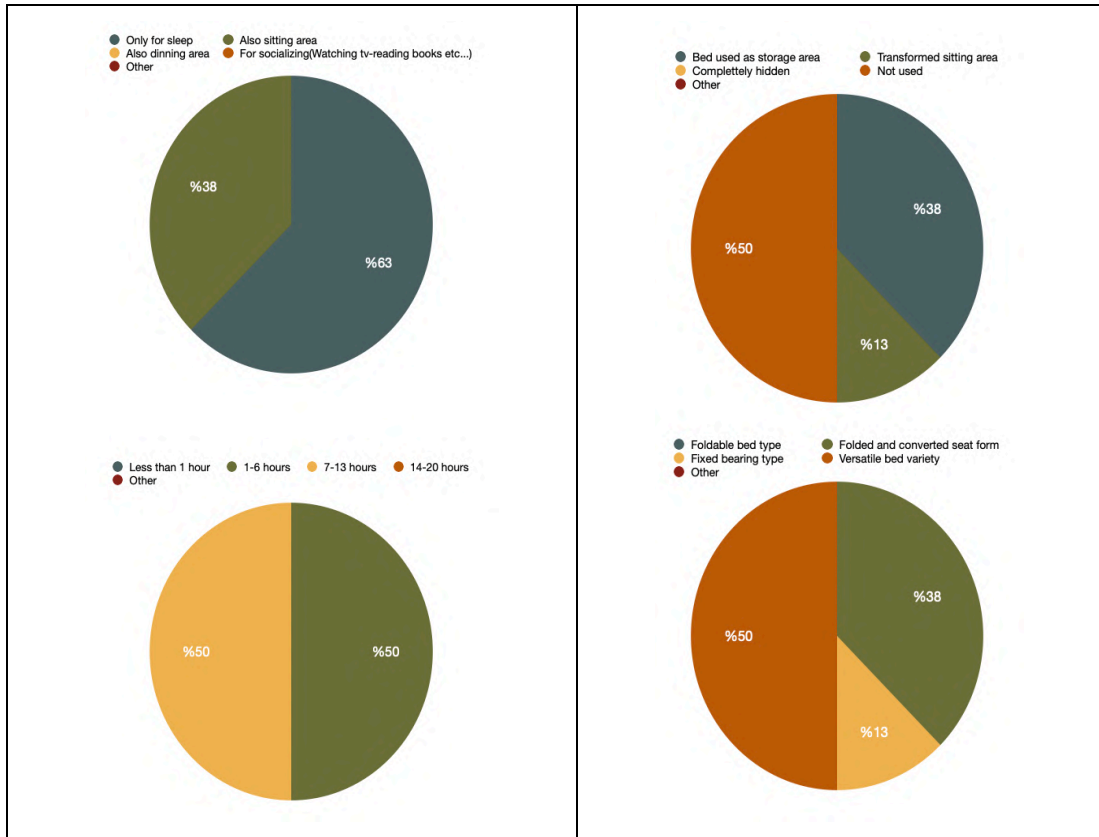


Figure 65. The time allocated to the bedroom and the use of the bed area and the ability to transform the bed into different functions and use it as a storage space

According to the research conducted among the users in the Mersinlik caravan region, 50% of the users use the sleeping area in their caravans between 7 and 13 hours, and 50% use the sleeping area in different time periods between 1-6 hours. In addition, users use the sleeping area for different purposes; while 63% is used only for sleeping, 38% can be used as a sitting area. In terms of bed types, 50% of the users use versatile beds, 38% use beds that can turn into seating areas, and 13% use fixed beds. Users generally do not use the sleeping area of the caravan for different functions; a small number of users generally use it for different functions. In general, the bed area is used for sleeping, which is a basic need.

The Mersinlik caravan area has a diverse storage system, with 50% allocated to various locations, 38% for kitchens and cabins, and 13% for storage and beds. 83% of caravanners use indoor toilets, with 17% outdoors. Toilets are individually inspected within the interior space. The park's unique toilet facility may reduce indoor toilet usage duration. Users store 50% of their hot and cold water usage in canisters, 38% through hydrophore systems, and 13% through other systems. Tank filling is 50% manual and 38% digital. Solar panels and heaters provide 50% and 50% respectively.

In summary, the research carried out in the Mersinlik caravan area reveals that users have a favorable opinion of the property. They mostly use it as a park area and like the presence of separate bathroom facilities and security measures. The poll specifically examined the interiors of caravans, and it found that all users expressed complete pleasure and did not feel constrained inside the limited space of the caravan. Approximately 63% of users make use of the interior space at different times throughout the day, for a variety of purposes including general use, taking use of warm air circulation, and engaging in activities such as eating and resting. The study examines the techniques of air circulation, revealing that 88% of caravans utilize windows for ventilation. 88% of the interiors had 6-8 windows sections, indicating a strong inclination towards natural circulation. The implementation of sustainable methods is apparent, since 50% of the electricity requirements are fulfilled through a mix of solar panels and batteries.

The Mersinlik caravan region is home to a diverse range of living accommodations, with the bedroom and kitchen quarters being the most commonly used areas. The

kitchen offers ample storage options, with 88% of caravans having 9-11 storage compartments. Gas stoves are the preferred culinary technique, especially for those facing electricity issues. The seating areas provide flexible utility, with 88% users using them for various purposes. The sleeping room is used for different lengths and purposes, with 63% used for sleeping and 38% as a seating area. Bed types with multiple functions are common, with 50% using convertible beds, 38% using seating and fixed beds, and 13% opting for fixed beds. Storage areas are dispersed across multiple locations, with 83% of toilet usage being indoors. Water usage is primarily done within an hour, with 50% storing hot and cold water in canisters and 38% using hydrophore systems. Both solar panels and heaters contribute equally to hot and cold water provision.

- **LAPTA CARAVAN PARK**

In the Lapta caravan area, findings from the conducted survey and field analysis indicate that users of the land typically do not stay in private or official caravan park areas. Those who camp along the coastal region generally prefer using semi-open spaces and tend not to utilize the interior section of their caravans. The survey and analysis suggest that the kitchen area is not being used. The space is observed to be solely utilized for storage and stocking items.

The survey conducted with users in the Lapta caravan region reveals important information about the preferences and usage patterns of caravan interiors. In particular, half of the caravan users feel restricted indoors, while the other half stay comfortably indoors. While half of the users choose to stay at night and the other half during the

day, some of the caravans that use the interior to cool off stated that they use the interior in different ways. While 50% of the indoor usage time was stated as less than 1 hour, it was determined that 50% of the usage time was 1-6 hours.

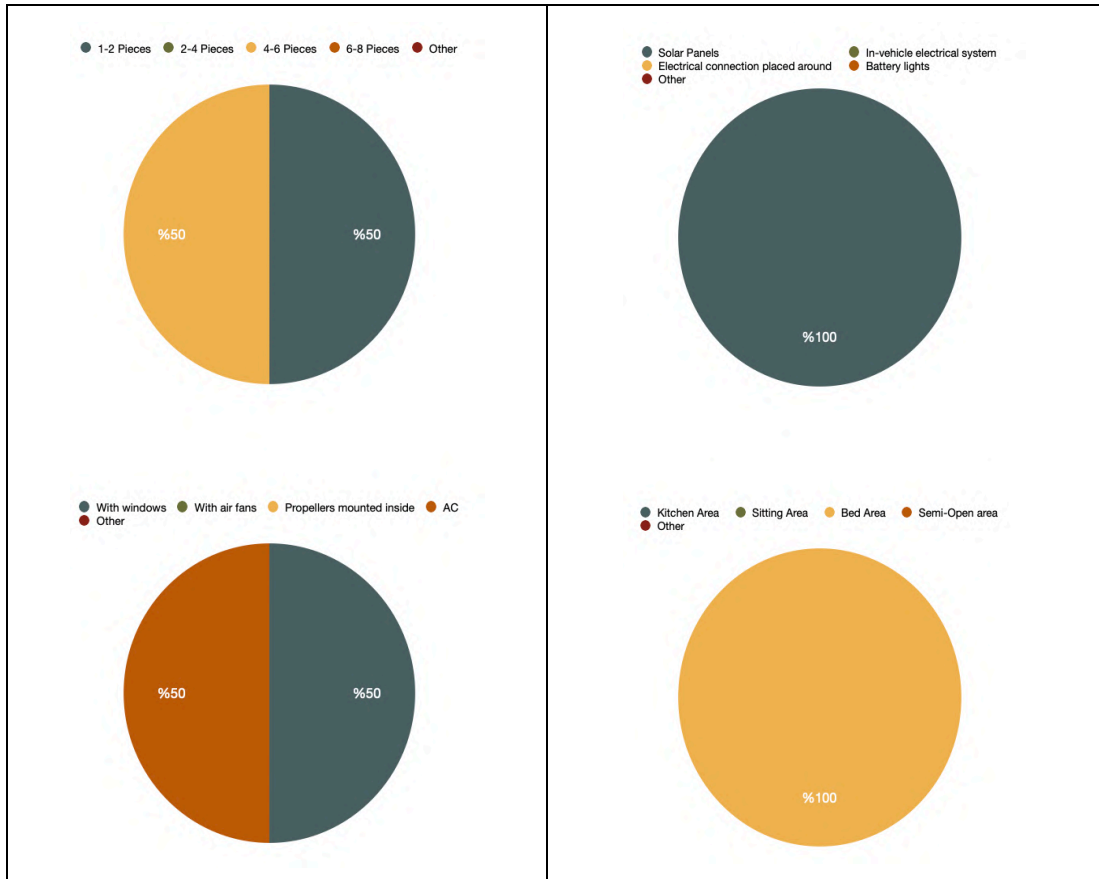


Figure 66. Caravan interior circulation and number of windows and indoor lighting system and the area that users use most in their caravans

The Lapta Caravan region's users report that half of their caravans have 4-6 window areas, while the other half have 1-2. The interior is 50% air-conditioned and 50% window-circulated, with all electricity supplied by solar panels. The Lapta region users find solar panels useful for meeting their caravan's electricity needs.

In the research conducted at Lapta Caravan Park, findings indicate that half of the users utilize the kitchen area at various time intervals, with 1-4 storage spaces available in the kitchen. Additionally, users specified using a microwave for cooking in the kitchen area. The other half of the users spend less than an hour in the kitchen area. Users mentioned having one storage space in the kitchen area and using gas stoves for cooking. Interestingly, they use gas stoves even though solar panels are present in the caravans. Users explained that the initial use of gas stoves is due to the electricity demand, and if the gas runs out, they resort to using electric stoves. This preference is attributed to the continuous usage of the kitchen area.

A survey of Lapta caravan users found that 2-3 people use the seating area, which can be converted into a kitchen table. All users use the sleeping area within 1-6 hours, with half using it for socializing and the other half as a seating area. Most users prefer a foldable bed type for seating, while the remaining users prefer an adjustable bed for versatility.

In the research conducted among users in the Lapta caravan region, the distribution of storage areas is revealed as follows: 50% of the storage space is located in the bed section, while the remaining 50% is stored in bags. The caravan interior accommodates indoor toilet facilities, featuring foldable toilets used by users solely to meet their basic needs.

The research reveals that in the Lapta caravan region, users obtain hot and cold water through a hydrophore system, with tank filling facilitated by indicators. 50% of

caravans use electric combi boilers for hot water, while the remaining 50% use natural heat from outdoor containers. Waste in toilets is managed using a macerator, with 50% disposed of in storage areas and the remaining 50% using a pump system to convert solid waste into liquid.

In summary, the survey accomplished among users in the Lapta caravan region yields useful insights into the preferences and usage habits of caravan interiors. Significantly, there is an equal distribution of caravan users, with 50% experiencing confinement within and the remaining 50% finding solace in the interior. Users have different dates, with some using the caravan interior at night and others during the day. They also have different preferences for how to chill the interior. The research exposes a clear division in the amount of time spent indoors, with 50% of individuals spending less than 1 hour and the other 50% devoting 1-6 hours to indoor activities. Window areas also exhibit a same divide, with half of the caravans having 4-6 windows and the other half having 1-2 windows. The allocation of interiors between air-conditioned and window-circulated spaces is likewise evenly balanced, with all electrical requirements being fulfilled by solar panels.

Lapta caravans feature a bed space, kitchen area, and seating areas with 1-4 storage spaces. Gas stoves are used despite solar panels, primarily due to initial electricity demand. However, there is a potential shift towards electric stoves after the gas supply is exhausted. The sleeping area is primarily used for socializing and seating, with half of the time spent there being 1-6 hours. Foldable beds are preferred due to their versatility. Storage compartments are evenly divided, with 50% for the bed section and

50% for luggage. Indoor toilet facilities are collapsible, providing basic necessities. The hydrophore system uses electric combi boilers for hot and cold water, while natural methods like outdoor heat are used. Waste disposal is evenly distributed between waste storage facilities and a macerator system. Lapta caravan users display a variety of well-balanced patterns in their interior spaces, enhancing functionality and happiness within the caravan.

4.6 Spatial Organization of Caravans Semi-Open and Open Spaces in North Cyprus

In the Turkish Republic of Northern Cyprus, there are numerous caravan parks primarily located in coastal areas and on privately-owned properties. The spatial organization of caravans in Northern Cyprus may vary from one campsite to another. Due to the direct integration of caravans with the outdoor environment, the utilization of indoor space may be lower than outdoor space, depending on user preferences. Following conducted studies, some caravan users have addressed their living needs by enclosing partially exposed areas adjacent to their caravans. Fieldwork was carried out in six different caravan park regions, followed by the administration of surveys to caravan users. Information regarding the usage of semi-open and open spaces and user satisfaction was collected through the surveys. These data were subsequently examined and analyzed with graphs for the six identified caravan regions.

- **SILVER BEACH CARAVAN PARK**



Figure 67. Historical area next to the caravan parking area in Lapta (Photos Taken by Author, 2023)

According to the research conducted among users in the Silver Beach park region, it was revealed that users mainly stay during the day and spend time in semi-open areas where the interior space restricts them from mid-day to night hours. However, users avoid using these semi-open areas. The reason is the decision of the Famagusta Municipality to displace the caravan residents. Information about semi-open and open areas was analyzed with graphics. According to the research conducted among the users in the Silver Beach park area, while the users experience half the restrictions in the semi-open area, 33% are used in the morning, 33% at night and 33% in the evening. Although the use of semi-open areas is between 7-13 hours and 1-6 hours, they are generally used for entertainment purposes and dining. In the Silver beach area, users are accommodated in semi-open areas fixed to caravans.

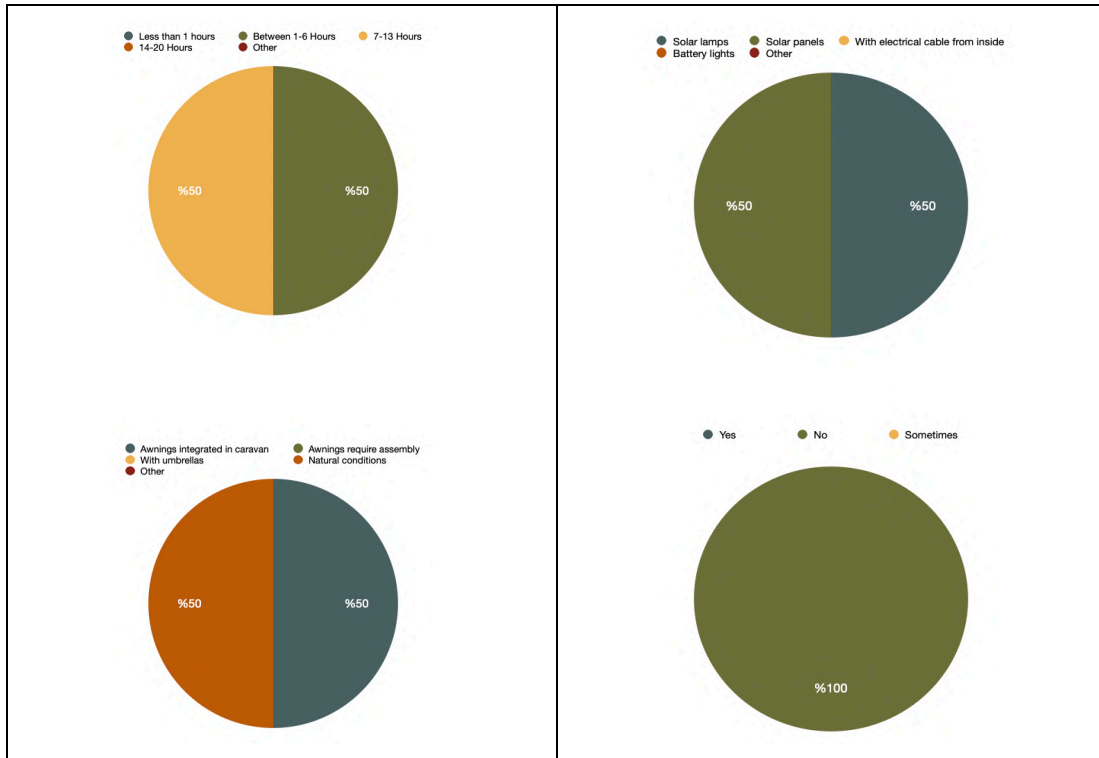


Figure 68. Aspects of use of the semi-open area of the caravans as a seating area and lighting system

According to the research conducted among the users in the Silver Beach park area, the time spent by the users in the semi-open area as a seating area varies between 7-13 hours and 1-6 hours. In addition, in semi-open areas, 50% of the users are protected from weather conditions by trees as natural methods. 50% of it is protected by awnings mounted on the caravan. Instead of being spread out in semi-open areas in the Silver beach area, users are spread out in a way that they always have easy indoor and outdoor areas close to their caravans. Semi-outdoor lighting is provided with solar lamps, saving electricity. The open space of the caravans does not restrict the users and the users use the open spaces happily.

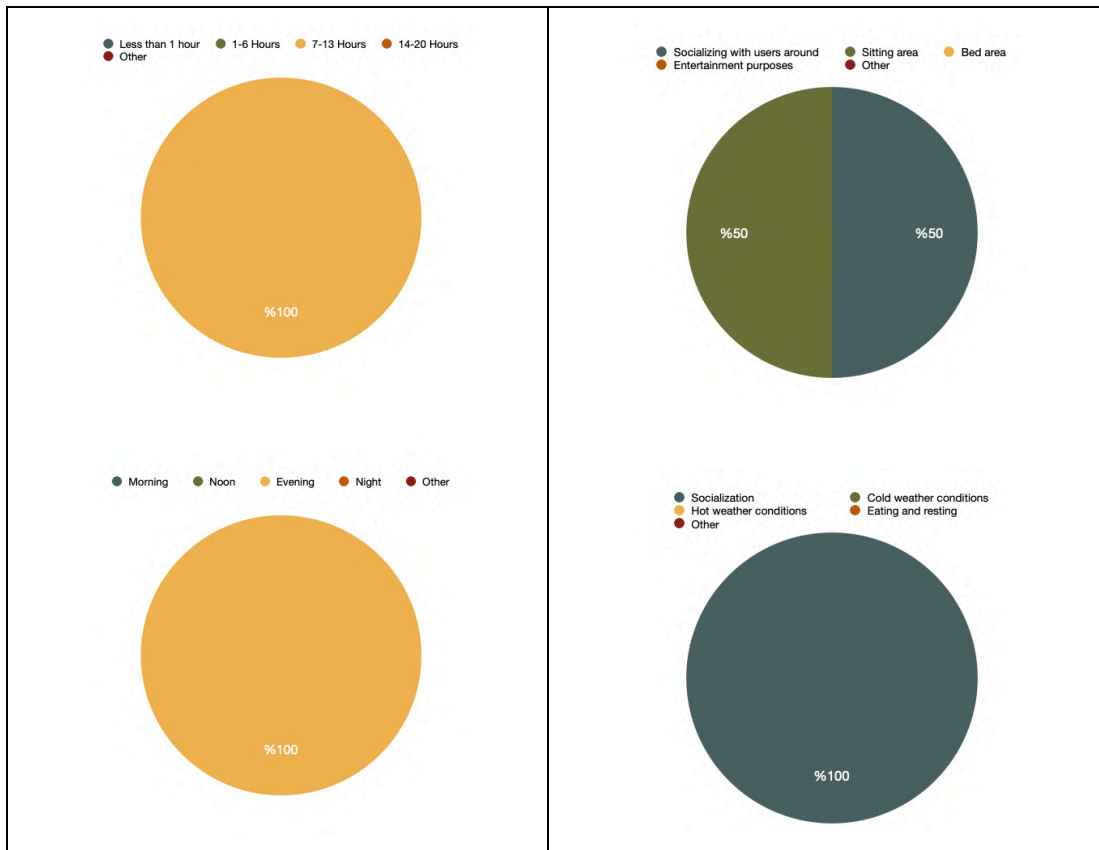


Figure 69. Users open space used and usage time during the day and usage function of open spaces and user satisfaction

According to the research conducted among users at Silver Beach park area, it was found that users utilize the outdoor space predominantly within the 7-13 hour time frame, with increased usage during the late afternoon. The purposes of using the outdoor space are divided, with 50% aiming to socialize with other users in the area and another 50% utilizing it as a seating area for relaxation. Users who make use of the outdoor spaces do so primarily for socialization purposes. In the Silver Beach region, caravan enthusiasts often stay in private areas, promoting socialization. However, municipal decisions have led to a decrease in caravan usage. Research shows that users in the park area are using solar lamps and solar panels for lighting in open

areas, as they spend a lot of time in these areas. This solution is considered profitable for electricity needs, as users are more likely to stay in designated private areas.

In summary, the research conducted at Silver Beach park revealed that users predominantly spend time in semi-open areas during the 7-13 hour timeframe, with increased usage in the late afternoon. However, the Famagusta Municipality's decision to displace caravan residents restricts the use of these semi-open areas. Despite facing limitations, users creatively solve challenges, such as lighting, by employing solar lamps and solar panels in open areas, which proves to be a cost-effective and sustainable solution. The study also indicates that users, despite reduced caravan usage due to municipal decisions, express satisfaction with designated private areas, emphasizing socialization as a key factor. Overall, the findings highlight the resilience and adaptability of Silver Beach park users in optimizing their outdoor and semi-open spaces for various purposes, contributing valuable insights for sustainable caravan park management.

- **KOCAREİS CARAVAN PARK AREA**





Figure 70. Uses of semi-open spaces (Photos Taken by Author, 2023)

A study conducted in Kocareis park area revealed that half of the users reported being restricted in semi-open areas, while the other half claimed no restrictions. The majority of users use these areas in the evening, with 60% using them at different times and 10% in the morning and afternoon. The majority of users use these areas for entertainment purposes, with 56% using them for entertainment and 44% for seating and relaxation. The semi-open areas have undergone modifications since being enclosed, leading municipalities to decide to remove caravan users from the park area. The study also found that 56% of users use these areas for entertainment, while 44% use them as seating areas. The duration of semi-open usage varies, with 90% using them for 1-6 hours and 10% for 7-13 hours.

The research reveals that 70% of users spend 7-13 hours in the semi-open seating area at Kocareis park area, 20% spend 1-6 hours, and 10% use it for less than 1 hour. In inclement weather, 60% use awnings and 20% use ground-mounted tents. Lighting in the semi-open area is provided by 40% solar panels, 30% cables, and 20% solar lamps. Variations in lighting systems and solutions are observed due to different

accommodation features in park and private lands. 90% of users are not restricted in open areas, but 10% are occasionally restricted.

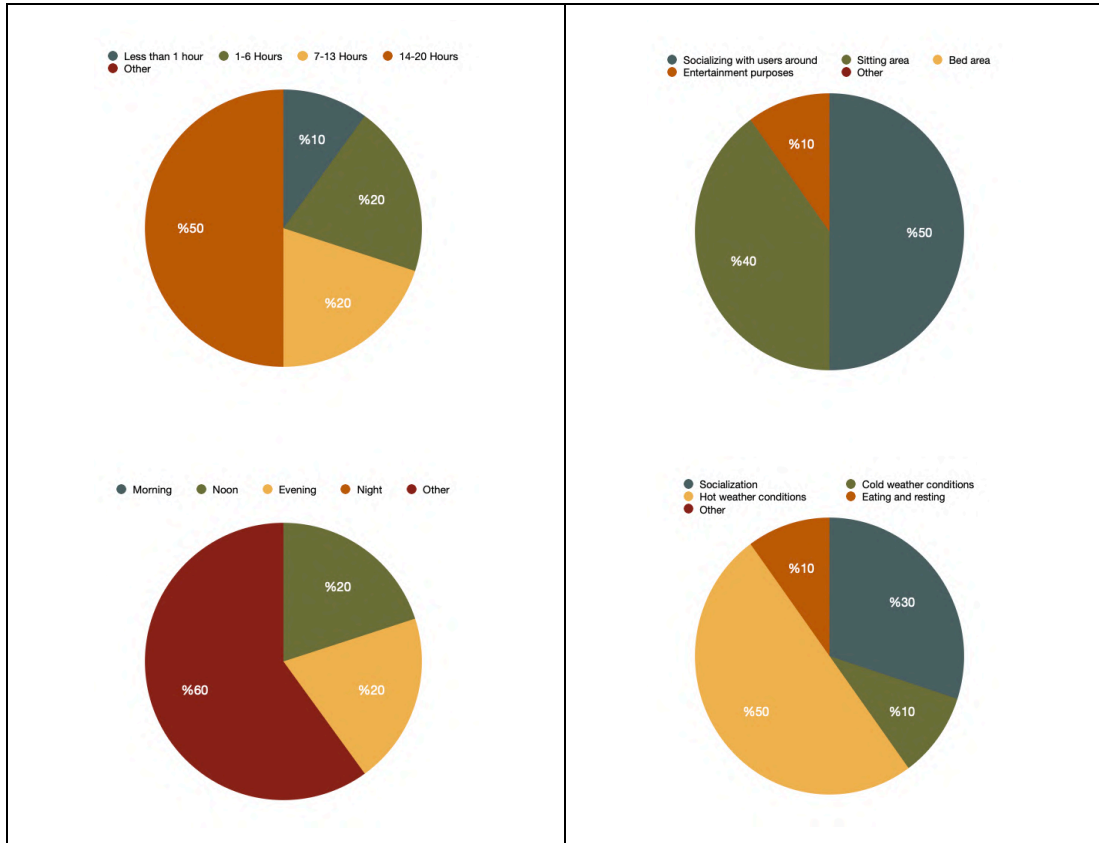


Figure 71. Users open space used and usage time during the day and usage function of open spaces and user satisfaction

The research conducted at Kocareis caravan park area reveals that users utilize outdoor spaces for various activities, with 50% using them for 14-20 hours, 20% for 7-13 hours, 20% for 1-6 hours, and 10% for less than 1 hour. Users engage in activities such as socializing, seating and relaxation, and entertainment. User satisfaction is influenced by factors such as warm air circulation, socializing, and dining.

In Kocareis park area, 50% of lighting is provided by solar panels, 40% by electricity, and 10% by solar lamps. Semi-open spaces are preferred for evening entertainment,

with 60% used for sitting and resting. However, semi-open spaces were closed without permission, causing differences in life satisfaction. The municipality of Famagusta decided to displace caravan users.

Outdoor use is favorably long-term, with 50% spending 14-20 hours, 20% for 7-13 hours, and 20% for 1-6 hours. Activities vary, with 50% focusing on socializing, 40% on sitting and relaxing, and 10% on entertainment. User satisfaction is influenced by factors such as hot air circulation, socializing, and eating. The park's lighting is mainly provided by solar panels, indoor cables, and solar lamps, highlighting the flexibility and adaptation of users to their location. In summary, by providing a comprehensive understanding of user behaviour, preferences and challenges in the Kocareis caravan parking area, valuable information has been provided for the effective management and improvement of caravan parking facilities.

- **İSKELE CARAVAN AREA**



Figure 72. Semi-open space used as a socialising area and close with tent (Photos Taken by Author, 2023)

The research and field observation undertaken in the Iskele caravan region reveal that the users currently inhabiting the land lack legal ownership rights. The land is neither privately owned nor included within the boundaries of the municipal park area. As a result, local governments have taken steps to enforce persons with caravans in the vicinity to either leave or properly secure their vehicles.

Caravan users have autonomously delineated their places by constructing partially enclosed areas. The data collected from surveys done with caravan users in the Iskele region has been assessed and analyzed using pie charts. According to the research conducted among the users in the Iskele caravan parking area, 80% of the users do not experience restrictions in semi-open areas, while 20% experience restrictions. While 40% of the semi-open space is used in different time periods during the day, 30% is used in the evening, 20% at night, and 10% at noon. The purpose of users using semi-open areas is 89% for sitting and relaxing and 11% for entertainment purposes.

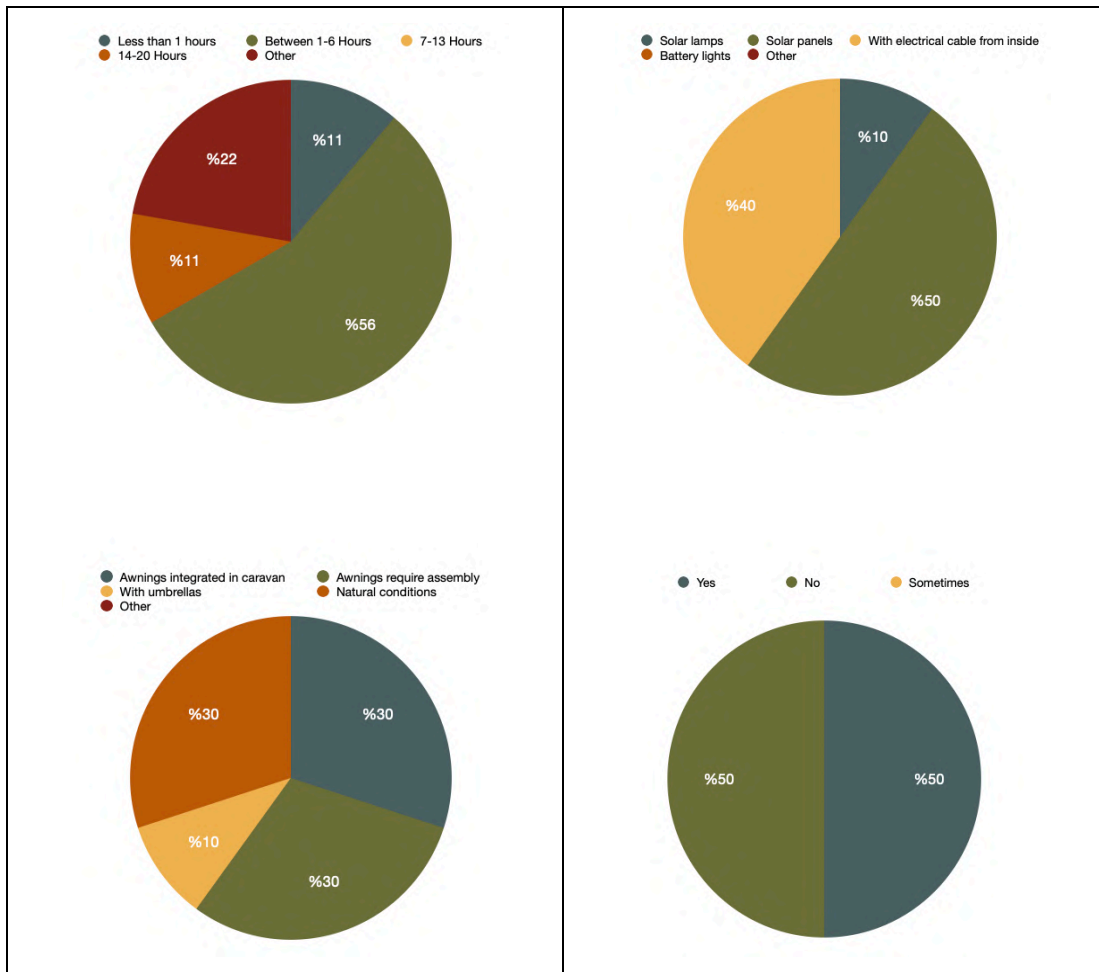


Figure 73. Aspects of use of the semi-open area of the caravans as a seating area and lighting system page

The Iskele caravan area has a high usage of semi-open areas, with 56% of users using them during the 1-6 hour time zone, 22% in different time zones, and 11% in the 14-20 hour time zone. These areas are protected by 30% natural means and 30% by awnings. Lighting in semi-open areas is provided by 50% solar panels, 40% by indoor electrical cables, and 10% by solar lamps. Half of the users use open spaces, with half satisfied with their use.

Outdoor space usage is distributed among users at the Iskele caravan park area, with 60% using it in the evenings, 30% at various times, and 10% at night. Users prefer

open areas when the sun is not present due to excessive heat during sunny periods. 44% of users use outdoor spaces as seating areas, while 22% use them for socializing and entertainment. 70% of users use open areas for dining and relaxation, while 10% enjoy warm weather conditions.

In summary the research accomplished in the Iskele caravan region suggests that the existing residents do not own legal ownership rights to the property. As a result, local authorities are implementing limitations on individuals who use caravans in the area. The site is neither privately owned nor included in a municipal park area. Users have independently designated their spaces, creating partially enclosed zones. Survey data collected from Iskele caravan users reveals that 80% of them do not encounter any constraints in semi-open spaces, while the remaining 20% do experience limitations. The primary usage of semi-open areas is for seating and leisure activities, accounting for 89% of their function, while the remaining 11% is dedicated to entertainment reasons. The study reveals that 40% of people use semi-open areas during the day, 30% at night, and 10% at midday. They use natural methods like trees and awnings to protect themselves from bad weather. Solar panels, indoor electrical lines, and solar lamps provide lighting in semi-open areas. Open areas are used 60% of the time, 30% at different times, and 10% at night. The preference for open areas during low sunlight is to avoid excessive warmth. The most common reasons for using open spaces are seating 44%, socializing 22%, and entertainment 70%. Solar lamps and panels provide lighting in open areas, with 11% using interior electrical cables. The study underscores the need for legal ownership issues and understanding user preferences for effective urban planning.

- **TATLISU-KAPLICA CARAVAN PARK AREA**



Figure 74. Closing the semi-open area and transforming it into a living space (Photos Taken by Author, 2023)

Research in the Tatlısu caravan area reveals that land users can be categorized into positive and negative parking spaces. The positive area is in the northern section, while the negative area is in the southern section. In the negative area, each user creates their own space by closing semi-open and open areas separately. In the Kaplıca caravan park area, 90% of users do not experience restrictions in semi-open areas, while 10% do. The majority of semi-open areas are used at different times, with 56% for seating, 22% for dining, and 11% for entertainment. The usage time of semi-open spaces varies, with different usage periods in different zones.

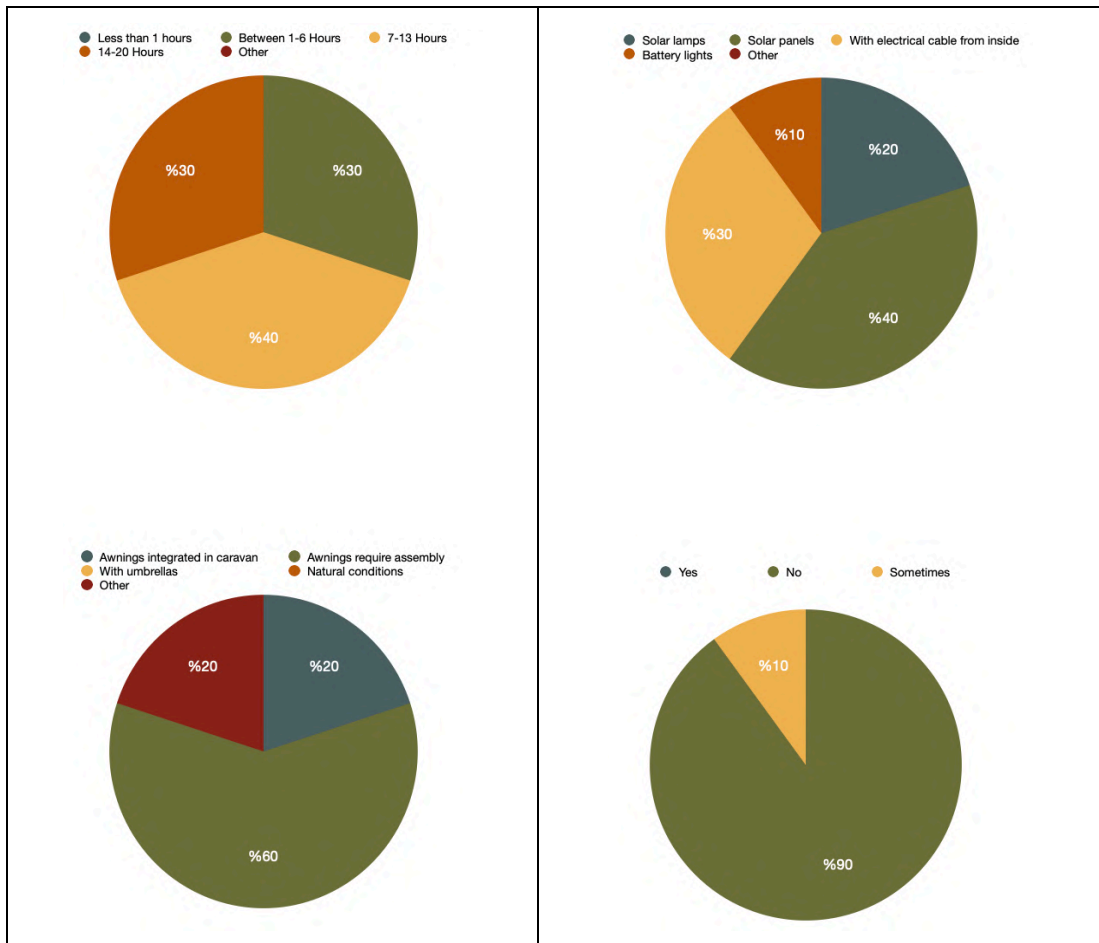


Figure 75. Aspects of use of the semi-open area of the caravans as a seating area and lighting system page

The Kaplica caravan area has a high usage of outdoor space, with 56% of users using it during noon hours. The majority of users spend their time in semi-open areas, with 40% using them during the 7-13 hour period, 30% during the 1-6 hour period, and 30% during the 14-20 hour period. Weather protection is mainly through ground-mounted awnings, with 20% opting for caravan-mounted awnings. Lighting is provided by solar panels, electrical cables, and solar lamps. However, 90% of users experience restrictions in open areas, with 10% occasionally encountering restrictions. The open area usage is highly satisfied, with 56% using it for dining and relaxation, 33% for socializing, and 11% for cooling off. In the spa caravan area, 50% of lighting is

provided by pulling electric cables from the interior, while 20% is provided by solar panels and lamps.

In summary, the research and field analysis conducted in the Tatlısu caravan area identify two distinct groups of land users: those associated with positive parking space in the northern section and those associated with negative parking space in the southern section. In the negative parking area, each caravan user has personalized their space by enclosing semi-open and open areas to create living spaces. In the Kaplıca caravan park, 90% of users experience no restrictions in semi-open areas, with 56% utilizing them at different times. The primary purposes for semi-open spaces are seating 56%, dining 22%, and entertainment 11%. Usage time is distributed across different periods, with 40% in the 1-6 hour zone, 20% in the 7-13 hour zone, and 20% in the 14-20 hour zone. Weather protection measures include ground-mounted awnings 60%, caravan-mounted awnings (20%), and various methods (20%). Regarding lighting in semi-open areas, 40% is provided by solar panels, 30% by electrical cables drawn from the interior, and 20% by solar lamps. In open areas, 90% of users face constant limitations, and 10% encounter occasional restrictions. The distribution of open space usage is 56% during noon hours and 44% at various other times. Usage durations vary, with 50% during the 7-13 hour period, 40% in the 1-6 hour period, and 10% in the 14-20 hour period. Users heavily utilize open spaces, expressing satisfaction for dining and relaxation 56%, socializing 33%, and cooling off 11%. Lighting in open areas is primarily provided by pulling electrical cables from the interior 50%, with 20% from solar panels and solar lamps. In the Kaplıca caravan area, 50% of the lighting in open

areas is provided by pulling electric cables from the interior, while 20% is provided by solar panels and solar lamps.

- **MERSİNLİK CARAVAN PARK AREA**

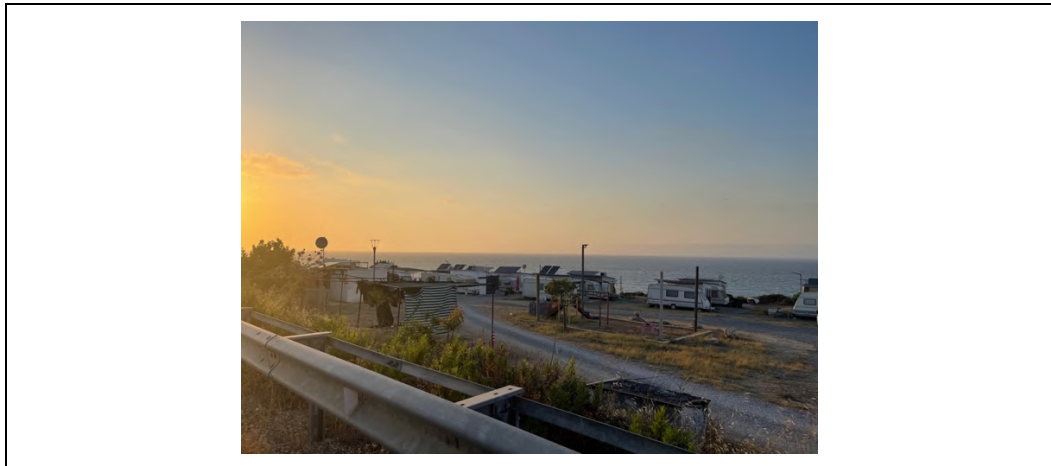


Figure 76. Mersinlik carvan park area and semi-open, open space area (Photos Taken by Author, 2023)

In the caravan area of Mersinlik, findings from the conducted survey and field analysis reveal that users of the land generally utilize it as a positive park area, equipped with separate toilet facilities and security measures. A survey at Mersinlik Caravan Park found that 63% of users use semi-open spaces during nighttime and 38% during the evening. These spaces are used for various activities, with 63% for dining and 38% for sitting and spending time. 63% spend time in semi-open spaces during the 14-20 hour time frame, while 38% do so during the 1-6 hour time frame. Users also use semi-open spaces in a closed manner, turning them into distinct functional areas. This suggests that semi-open spaces are often used for accommodation and transporting belongings.

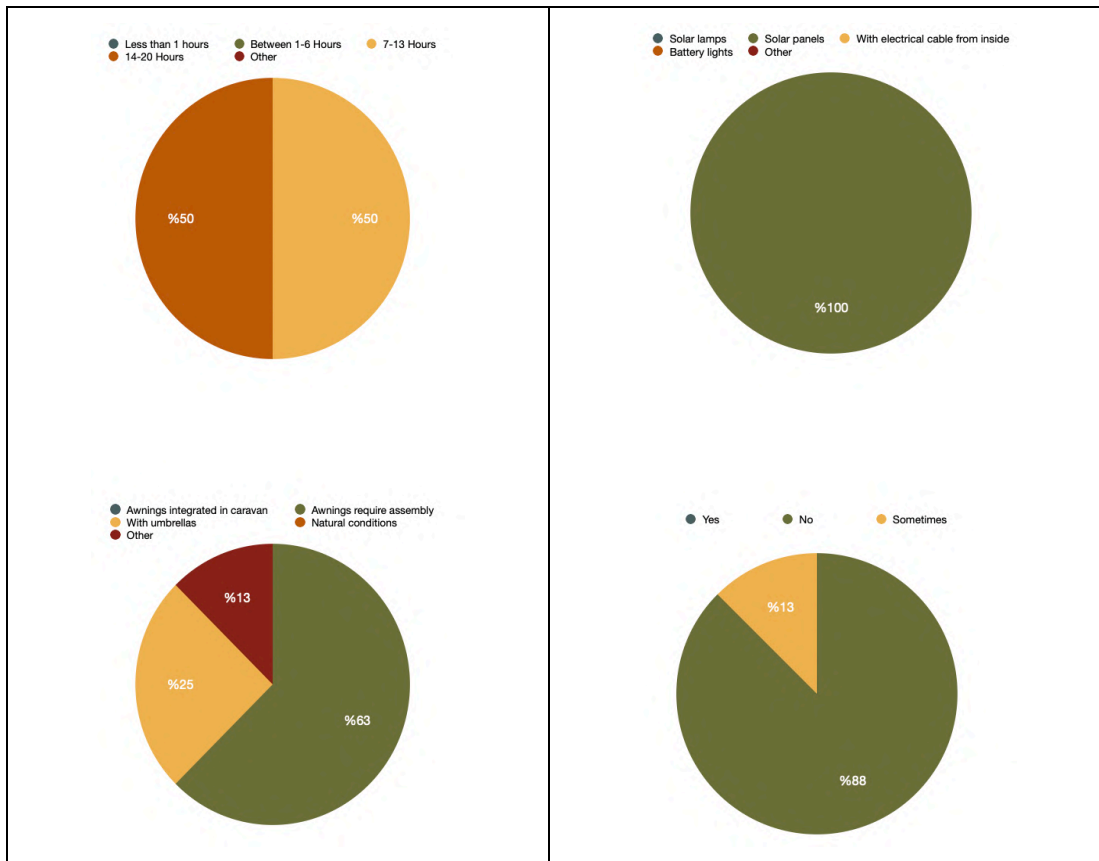


Figure 77. Aspects of use of the semi-open area of the caravans as a seating area and lighting system

The Mersinlik caravan area's research shows that users spend equal amounts of time in semi-open areas, using them as seating areas. The protection provided is diverse, with 63% using ground-mounted awnings, 25% using umbrellas, and 13% using alternative methods. Solar lamps are used for illumination, promoting an environmentally friendly environment. Only 13% of users experience restrictions in open spaces, suggesting a suitable thermal spring caravan area. Outdoor use is distributed evenly, with 88% using the area during the 14-20 hour period and at different times during the day. The open areas are primarily used for socializing, with 57% using them for eating and resting, 29% for socializing, and 14% for benefiting from warm weather. Users express satisfaction with the open space. 63% of outdoor

lighting is provided by solar panels, 25% by solar lamps, and 13% by indoor electrical cables.

In summary, the study conducted in the Mersinlik caravan area reveals positive user experiences, particularly in semi-open spaces. The survey indicates that users utilize these areas for various activities, such as dining and sitting, with 63% using them during the 14-20 hour time frame. Notably, users convert semi-open spaces into distinct functional areas for accommodation. Protection against adverse weather conditions with 63% using ground-mounted awnings. Solar lamps contribute to environmentally friendly illumination in semi-open areas. Users generally do not experience restrictions in open spaces, fostering a suitable environment for socializing and relaxation. The distribution of outdoor use shows 88% utilization during the 14-20 hour period. Satisfaction with open spaces is expressed by users, with 63% of outdoor lighting powered by solar panels. Overall, the Mersinlik caravan area provides a flexible and protected environment, enhancing user satisfaction and promoting sustainability.

- **LAPTA CARAVAN AREA**

In the Lapta caravan area, findings from the conducted survey and field analysis indicate that users of the land typically do not stay in private or official caravan park areas. Those who camp along the coastal region generally prefer using semi-open spaces and tend not to utilize the interior section of their caravans. As depicted in Figure 78, the survey and analysis suggest that the kitchen area is not being used. The space is observed to be solely utilized for storage and stocking items.

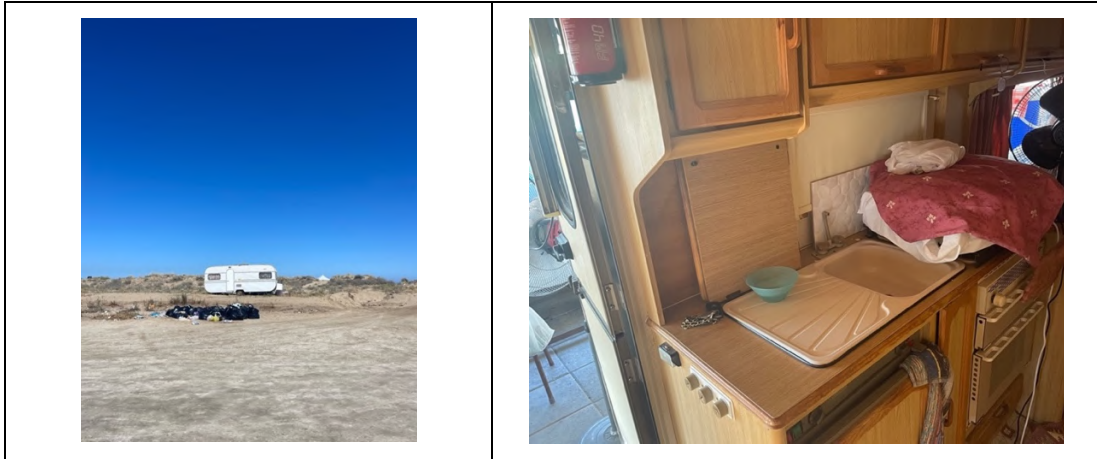


Figure 78. Unused permanent caravan in Lapta region and Kitchen area interior of caravan in lapta caravan area (Photos Taken by Author, 2023)

According to the survey conducted among users at Lapta Caravan Park, all users in semi-open spaces do not experience any restrictions. Half of the users utilize these spaces during the night, while the other half prefers them during the afternoon. Fifty percent of the users use the semi-open areas for dining and various activities, while the remaining half uses them for recreational purposes. The usage duration of semi-open areas for users is divided between the 14-20 hour time frame and the 7-13 hour time frame.

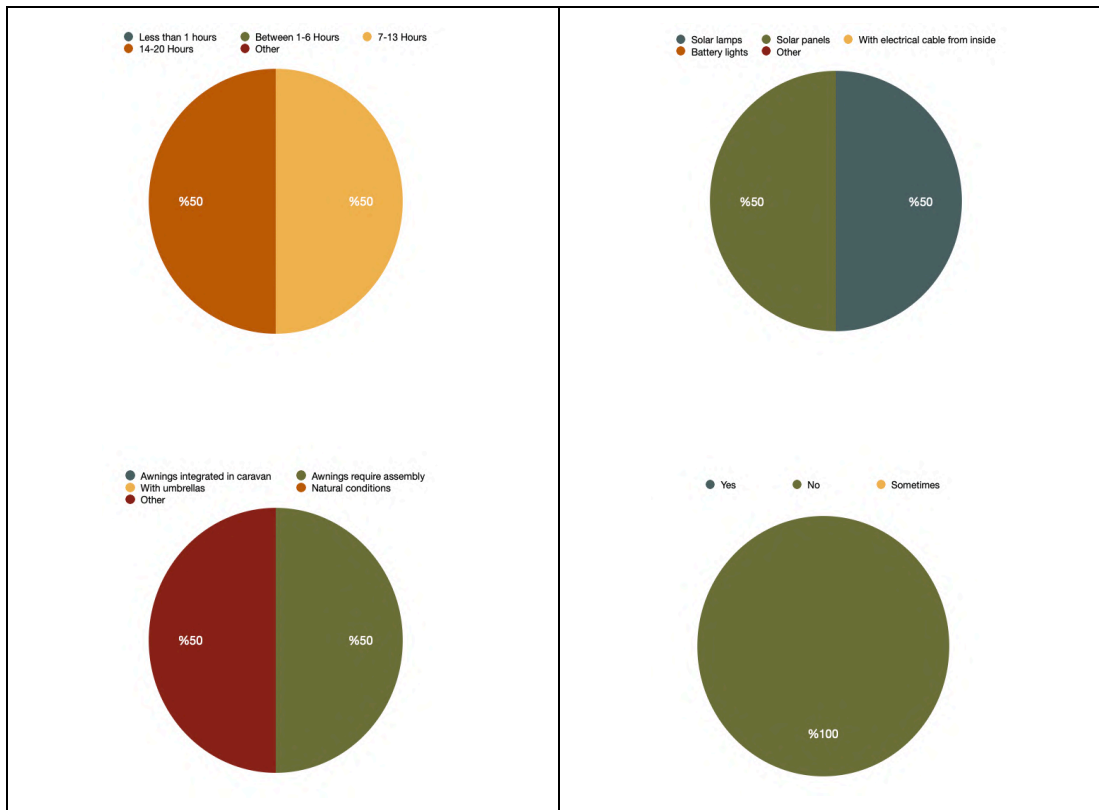


Figure 79. Aspects of use of the semi-open area of the caravans as a seating area and lighting system

According to the research conducted among users in the Lapta caravan region, the hours used by users in semi-open areas as seating areas are between 14-20 and 7-13 hours. While awnings that can be mounted on the ground are used to protect users from bad weather conditions in semi-open areas, different protection techniques can be used. These have been solved by moving to the interior. Semi-solar lamps and solar panels are used as lighting. Users stated that they were happy to use open spaces without experiencing any restrictions while using them.

The research on Lapta Caravan Park users reveals that open space usage is evenly distributed, primarily during afternoon hours, with usage durations of 7-13 and 1-6 hours. Users primarily use open spaces for socializing, and satisfaction with usage is

closely tied to social interactions. Additionally, 50% of outdoor lighting is provided by solar panels and 50% by solar lamps, according to the study.

In summary, the survey and field analysis of the Lapta caravan area indicate that users have a preference for semi-open locations rather than private or official caravan parks. They tend to utilize coastal regions for camping. Users in semi-open spaces encounter no limitations, with an equal preference of 50% for midnight and 50% for daytime usage. These areas have a variety of functions, with some designated for dining and others for recreation. The duration of usage ranges from 7 to 20 hours, with lighting being provided by solar panels and bulbs. The utilization of open space is prevalent in the afternoon, with an even distribution of usage over time, which promotes social connections. Solar panels and bulbs each contribute 50% to outdoor lighting. In general, the enjoyment of users at Lapta Caravan Park is strongly influenced by their social interactions in both open spaces and partially enclosed places.

4.7 General Evaluation of the Spatial Organization in North Cyprus

The research delved into the Karpaz seaside region, involving interviews with caravan users and survey responses. The findings were visualized using bar graphs, providing a comprehensive understanding of user contentment and organizational viewpoints across various caravan sites. The Karpaz coastal region also provided personal testimonies from consumers, providing context for the analysis. The survey findings were analyzed to assess satisfaction levels of caravan organizations and users, enabling a detailed understanding of the dynamics within and across different caravan parks. The study expanded its focus to include a wider range of viewpoints and behaviors

related to caravan use, enhancing the overall understanding of caravan culture, organizational dynamics, and user preferences.



Figure 80. Caravan interior area with semi open space (Photos Taken by Author, 2023)

Analyzed data from a study conducted with users in various caravan areas pertains to their perception of limited indoor space in their caravans and the specific time periods they utilize the indoor space. The survey encompassed a total of 8 distinct caravan areas, and data from 6 caravan park areas were analyzed through map analysis, site analysis, and survey research. Informal interviews were conducted with municipalities to gather information about the park areas where users stayed and their levels of satisfaction. Graphs indicate that most users do not feel confined in indoor places. Instead, they mostly use indoor areas for resting or sleeping at night. During the polls, certain users were individually interviewed, expressing contentment with their caravans. Nevertheless, they proposed enlarging the inside area of the caravan by

enclosing partially open spaces and linking them to the caravan's exit door and beyond, as depicted in Figure 80.

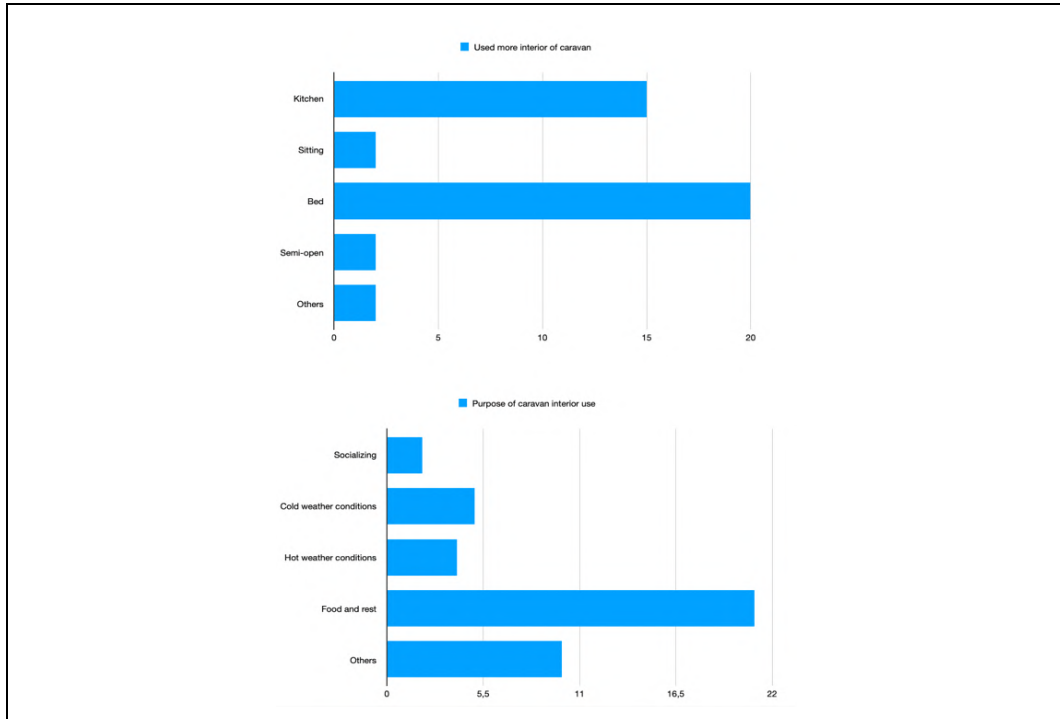


Figure 81. The intended use of the caravan interior and the most used area

The survey reveals that improving interior arrangements in caravans is crucial for increasing user satisfaction. The sleeping space is the most frequently used room, indicating a discrepancy between planned usage and actual user behaviors. Caravan makers and designers can modify interior arrangements to better meet actual usage requirements and enhance consumer contentment. The study also shows that caravan seating and kitchen spaces are primarily used for 1 to 6 hours, with occasional usage increasing to 7 to 13 hours. To maximize efficiency and utilization, design adjustments should incorporate adaptability in caravan interior layouts. The survey results also reveal that users generally use the toilet area for less than 1 hour and the sleeping space for 1 to 6 hours. Caravan users in Northern Cyprus prefer semi-open and open regions

due to favorable weather conditions. Therefore, caravan designers should prioritize design enhancements to optimize user pleasure in restroom and sleeping compartments.

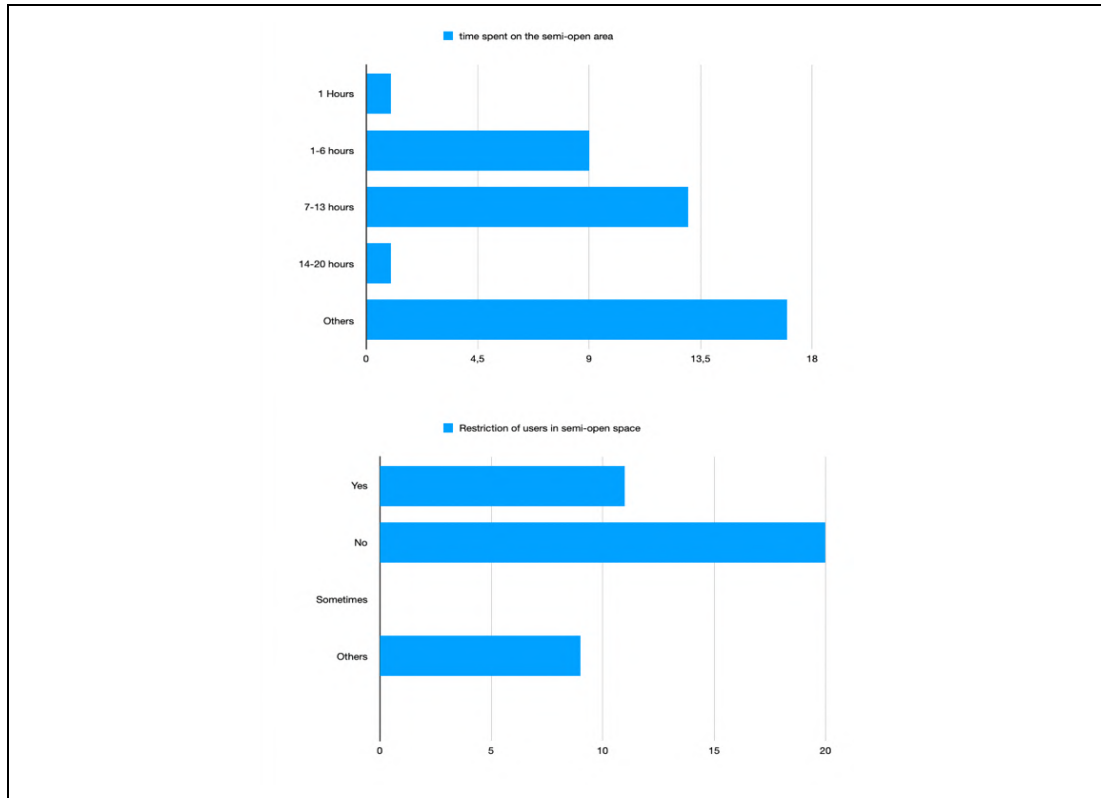


Figure 82. The restriction status of the users of semi-open spaces and the duration of the use of semi-open spaces

Analysis of the survey data indicates that caravan users generally spend between 7 and 13 hours in semi-open places, utilizing them at various time intervals. Moreover, a significant proportion of users encounter no limitations when utilizing semi-open areas. The data suggest that individuals who utilize caravans feel pleasure in spending long periods of time in large and open regions, and they express contentment with the freedom to use these spaces without any limitations.

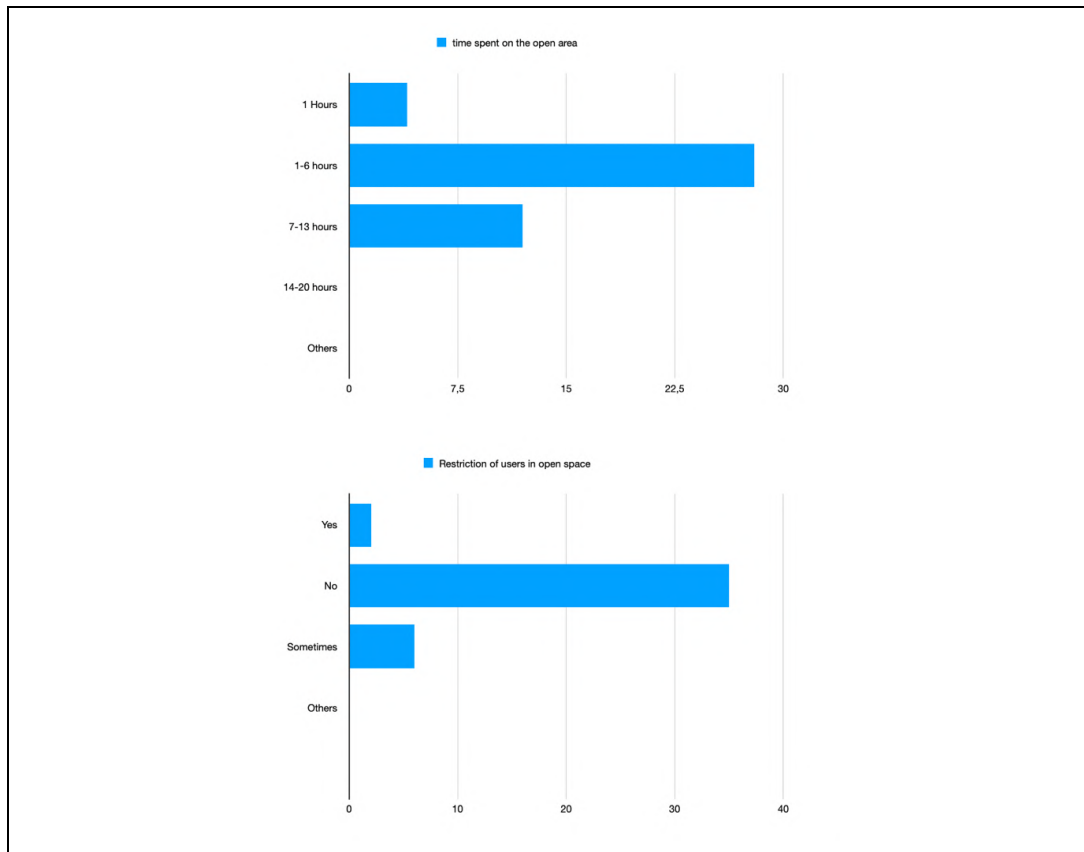


Figure 83. The restriction status of the users of open spaces and the duration of the use of open space

The survey data shows that caravan users frequently use open spaces for a moderate duration of 1 to 6 hours, expressing satisfaction due to the freedom from limitations. To increase user contentment, open spaces in caravan design should align with user preferences and incorporate elements that meet or exceed user expectations. Campaign users prefer spacious environments, especially during noon hours, and use semi-open places for dining and food preparation. However, legal and philosophical interpretations of caravans have evolved due to the increased use of partially exposed areas. To improve user satisfaction, designers should prioritize design enhancements during peak noon hours to enhance functionality, comfort, and visual appeal of semi-open spaces.

The results of these findings are essential for developing ways to improve users happiness in caravan design. Users frequently set up camp on private properties or in unmarked areas, where they tend to enclose open spaces and adapt and alter the surroundings without defined park spaces. Consequently, numerous caravan users have encountered limitations or even eviction as a result of choices made by local municipalities. To tackle this problem, one potential solution is to allocate specific private park spaces or prioritize design enhancements, especially during the evening and night, to enhance the appeal and usability of open areas for cooking meals. Implementing such a strategy might be really successful in enhancing overall contentment among caravan enthusiasts and guaranteeing more favorable encounters in outside environments.

4.8 General Analysis of Caravan Users and Caravans

The research investigates the caravan culture in Northern Cyprus, focusing on user experiences, challenges, and adaptation approaches. The study highlights the need to address legal, infrastructural, and community-related factors to improve user satisfaction and sustainability. Maraş has experienced a decline in residential areas and land availability, leading to people occupying coastal areas with caravans during the summer months. The caravan culture has the potential to develop sophisticatedly, enriching both the caravan culture and the country's cultural, social, and tourism aspects. The study analyzes the dynamics, difficulties, and user experiences of caravan culture in Kocareis, İskele, Tatlısu, Mersinlik, and Lapta. The Kocareis Park Region, İskele Caravan Region, and Tatlısu Caravan Park all face unique challenges and satisfaction levels for caravan owners. The Kocareis Park Region provides secluded areas for social gatherings, but residents face difficulties due to lack of official parking

or meeting spots. The İskele Caravan Region lacks adequate legislative regulations to protect caravan accommodation rights, causing discontent among users. The Mersinlik Caravan Park residents exhibit contentment in their relaxed lifestyle, but economic difficulties contribute to sporadic trips and seasonal changes. The Tatlısu-Kaplıca Caravan Region identifies two main categories: contented and retired individuals in the northern section and those experiencing challenges and using adaptive strategies in the southern section.

Due to the absence of legal rights and a dedicated association for caravanners in the Northern Cyprus region, they encounter challenges in leaving their caravans in allocated parking areas or lands after periodic use. Consequently, users resort to parking their caravans in available spaces within city centers. In the Famagusta and Kyrenia regions, where specific parking areas for caravans are lacking, users often park their caravans on city roads or occupy parking spaces in their building premises (Figure 84).

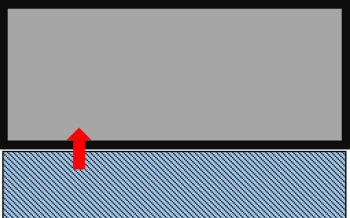

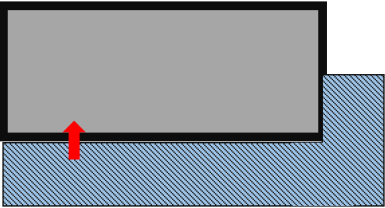

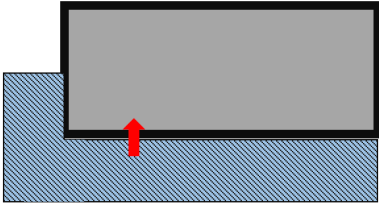

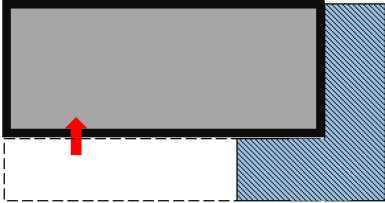

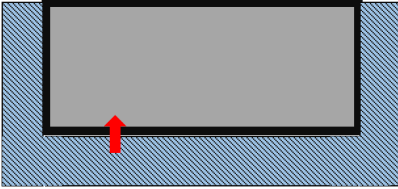



Figure 84. Caravans are occupying the car park in front of buildings and around (Photos Taken by Author, 2023)

This research focuses on urban challenges in Northern Cyprus, investigating the organization, allocation, and impact of caravans in these areas. The study involves interviews and visits to caravan parks owned by municipalities in Silver Beach, Iskele, Tatlısu, Mersinlik, Lapta, and Güzelyurt. A total of 48 individuals were interviewed in these areas to evaluate the effectiveness of caravan usage and lifestyle patterns. The aim was to gain valuable insights into the overall situation of caravan parks in these regions.

The primary issue observed in the caravans in the Silver Beach, Iskele, Tatlısu, Mersinlik, Lapta, and Güzelyurt areas, where site analysis was conducted, is that caravaners tend to deviate from caravan culture and begin transforming their caravans into fixed locations they wish to escape. The majority of caravans in these areas have been immobilized, with semi-open and open spaces enclosed to as living areas. The additional features added to these areas are detailed in the table below and have been analyzed comprehensively.

Table 2. Classification of additions according to the type additional relationship

CLASSIFICATION OF ADDITIONS ACCORDING TO THE TYPE ADDITIONAL RELATIONSHIP		
TYPE	RELATIONSHIP	VIEW
FRONT ADDITION		
FRONT AND RIGHT SIDE ADDITION		
FRONT AND LEFT SIDE ADDITION		
BACK SIDE ADDITION		
COVERING (FRONT AND RIGHT,LEFT SIDE) ADDITION		

In addition, the research expanded its scope to examine the wider influence of caravan culture, evaluating the ways in which users contribute to the cultural milieu, social interactions, and tourism industry of the nation. This comprehensive analysis encompasses various aspects, including users satisfaction and their influence on the development of the caravan culture. The study seeks to provide a thorough examination of the complex interplay between caravans, their users, and the societal and cultural dynamics of the Northern Cyprus region.

4.9 Legal Situation of caravans in North Cyprus

In the Turkish Republic of Northern Cyprus, Gazimağusa, İskele, Girne, and Güzelyurt municipalities, based on informal interviews, it has been determined that there is no specific law regarding caravan usage. However, in general, there should be certain rules and regulations concerning caravan usage and accommodation. For users staying on private lands, the rules are typically determined and enforced by the landowner.

The following elements may be included in the caravan usage regulations:

Caravan parks and other designated lodging areas in the Turkish Republic of Northern Cyprus are designed to ensure safety and public order by implementing strict restrictions on speed, parking zones, and proper trash management. These measures aim to reduce dangers and improve the safety of both caravan users and their neighbors. Access regulations may be imposed on specific facilities and services, such as energy, water supply, and waste disposal, to manage resource allocation and ensure the long-term viability of the park's infrastructure. This ensures equitable allocation and mitigates excessive utilization, fostering a sustainable and environmentally conscious environment for all caravan users.

Caravan owners bear distinct financial obligations, including yearly registration fees, site rental costs, and additional taxes levied by municipal authorities. These fees help maintain and enhance caravan parks, providing necessary amenities, security measures, and improved services. Financial contributions also support local communities by financing public services and infrastructure initiatives. Regulatory compliance is another important aspect of caravan usage, including safety protocols, environmental mandates, and land utilization guidelines. Authorities conduct inspections to ensure compliance with these standards, promoting a uniform and safe environment within caravan parks. Community engagement is another key aspect of caravan parks, involving residents in the formation of associations, organizing activities, and implementing collaborative efforts to improve the quality of life within the park. By utilizing efficient communication channels and engaging in collaborative decision-making processes, caravan users can actively participate in the improvement of their living environment. In conclusion, caravan parks in the Turkish Republic of Northern Cyprus are designed to promote safety, public order, and community engagement.

4.10 Chapter Conclusion

Ultimately, the increase in the use of caravans in the Turkish Republic of North Cyprus (TRNC) signifies a significant change in lifestyle preferences driven by the region's population expansion and the difficulties brought about by urban development. Caravan aficionados, from various demographic backgrounds, demonstrate a distinct passion for converting their mobile homes into permanent living places that are customized to their own requirements. Nevertheless, this increasing popularity is accompanied by adverse environmental and socioeconomic repercussions. From an

ecological standpoint, it is crucial to prioritize sustainable energy solutions and efficient waste management in order to reduce the ecological consequences of the growing trend of caravan living. From a social perspective, the interactions between individuals who utilize caravans and municipal authorities highlight the significance of resolving the regulatory frameworks that regulate this particular lifestyle choice.

The study elucidates the many and complex obstacles encountered by caravan users, encompassing legal complexities as well as inadequate infrastructure. Caravan enthusiasts face a challenging landscape when it comes to dealing with municipal communication, obtaining permits, and developing infrastructure. The variations in caravan behavior based on geography underscore the importance of comprehending the distinct requirements and preferences in different places within the TRNC. It is essential to acknowledge the inherent duality of caravanning, which involves providing flexibility and customized living spaces, while also dealing with legal ambiguities, infrastructure constraints, and social dynamics.

The government, urban planners, and caravan lovers should collectively strive to develop sustainable solutions that successfully address the advantages and disadvantages connected with this changing lifestyle preference.

Chapter 5

SATISFACTION OF THE CARAVAN USED FOR ACCOMMODATION IN NORTH CYPRUS

The study explores North Cyprus residents satisfaction with caravan accommodations, focusing on the increasing use of caravans for travel and short-term lodging. It identifies critical influencing elements and analyzes the effects of design, facilities, and location. The study highlights the diverse selection of rooms based on individual needs and lifestyles, with rural areas offering tranquility and urban areas offering employment and education. Most caravans are older and only used within designated areas, with semi-open and open areas receiving greater utilization than closed areas. To improve flexibility, multifunctional areas for dining and working could be created. The study also suggests that caravan designs should be modifiable by users or designers. Survey responses reveal that users are unhappy with the lack of designated camping spaces, making it difficult for them to safely leave and use their caravans. Users prefer state-owned park areas where they can stay legally by paying taxes. Without a special parking area for caravanners, they will continue to be evicted from the areas and special parking areas.



Figure 85. Kıbrısgec.tv headline image 'Caravan owners have until 4 August to leave the land' (URL 18) (Photos Taken by Author, 2023)

The absence of a designated park area for caravaners in the Turkish Republic of Northern Cyprus, leading them to camp in unauthorized locations, can indeed expose them to various risks. Especially during adverse weather conditions, if proper preparations have not been made or if they have positioned themselves in unsuitable areas, serious dangers can arise for the caravaners. For instance, on January 31, 2024, a hurricane occurred on the island of Cyprus, resulting in caravaners being materially and spiritually affected (Figure 86.).

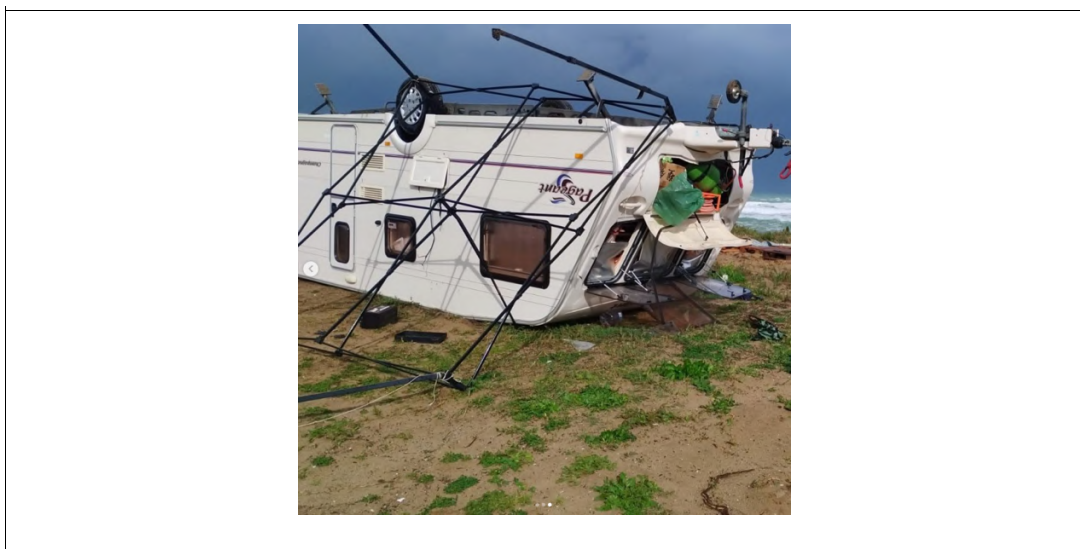


Figure 86 The situation of caravans after the hurricane (URL 19) (Photos Taken by Author, 2023)

In such a situation, a caravan park organized with trees that create a microclimate can prevent both material and spiritual harm to caravaners. These trees can shield caravaners from adverse weather conditions and mitigate environmental factors' effects. Furthermore, a well-maintained park area can prevent potential damages by ensuring caravaners safe and orderly positioning. Establishing a caravan park can yield positive outcomes not only for caravaners but also for the environment. With proper planning and design considerations for sustainability, such a park area can be created without causing harm to the environment. Thus, caravan culture can be sustained in a safe and environmentally friendly manner.

Kalyumet camping offers various lodging options including tents, cabins, and caravans. Additional amenities like electricity, internet, and water can be provided upon request. Wet areas and administrative buildings are free of charge. The forest-based establishment offers land activities for all ages and water-based activities in the vicinity of a natural pond and man-made pools. Wet areas and administrative buildings are available at no cost (Ari,2019).



Figure 87. Kalyumet camping area with satalite image

The environmental analysis of caravans in the Cyprus region has shown that they are not environmentally sustainable and have detrimental impacts on the environment when parked in unauthorized areas. Therefore, it is recommended to suggest sustainable caravans for northern Cyprus residents. These caravans are often constructed using sustainable materials and energy-efficient principles, including solar panels, greywater recycling systems, energy-efficient appliances, and environmentally-friendly building materials (Koçhan, 2022). Solar energy is a key feature of sustainable caravans, as it reduces the need for fossil fuels. Greywater recycling systems process and recycle wastewater from sinks, showers, and kitchens, reducing water usage and preserving natural resources. Energy-efficient devices are also common in sustainable caravans, reducing energy usage and mitigating their ecological footprint. Green building materials promote resource efficiency and waste reduction. Composting toilets are used in eco-friendly caravans to minimize water consumption and enhance waste disposal. These features enhance the ecological sustainability of caravans, making them a more environmentally friendly lifestyle choice for Northern Cyprus residents.

An incentive to seek out caravan's manufactured using environmentally sensitive methodologies is that they generally employ more sustainable, long-lasting, and ecologically sound materials. Some manufacturers utilize timber-framed panels in constructing caravan walls and ceilings. The origin of these materials can determine their environmental impact, potentially leading to deforestation, displacement, or the extinction of natural species. Wood frames in caravans may have reduced durability

when camping off the grid or traveling through hard terrain, as this material is more prone to warping, rotting, and insect infestation, particularly in tropical environments. Aluminum is ranked highly as an environmentally friendly material when compared to other materials.

Here are a few reasons why aluminum can be considered environmentally friendly:

1. **Energy efficiency:** Aluminum production requires less energy than the production of many other materials, including steel. This means that the production of aluminum has a lower carbon footprint.
2. **Recyclability:** Aluminum is one of the most recyclable materials, and it can be recycled indefinitely without losing its quality. This means that recycled aluminum can be used to make new products, reducing the need for new raw materials and conserving resources.
3. **Durability:** Aluminum products are often long-lasting, which means that they can be used for many years before needing to be replaced. This can reduce waste and the environmental impact of product disposal.
4. **Lightweight:** Aluminum is a lightweight material, which means that products made from aluminum often require less energy to transport, further reducing their environmental impact.



Figure 88. Green RV’s company designed sustainable caravans with aluminium (URL 19)

Green RV company started to design caravans with aluminum materials and bring them into our lives. These caravans are examples of environmentally friendly and sustainable caravans. For example, some caravans can be equipped with solar panels or other renewable energy sources such as deep cycle AGM batteries or Lithium Batteries, which can help reduce the need for fossil fuels and reduce your carbon footprint., Such caravans can also be designed and offered to users in Northern Cyprus caravan users.

Chapter 6

CONCLUSION

In Northern Cyprus, caravan enthusiasts can contribute to tourism and contribute to the caravan culture. However, abandoned storage areas and lack of legal caravan parks have led to inappropriate practices. Users enclose and block spaces, negatively impacting the environment and pushing the caravan culture towards extinction. A study suggests establishing comprehensive legislation allowing users to lease parks in surrounding or private areas for accommodation, covering a significant number of users and contributing to the development of caravan culture. The study aims to address challenges faced by caravan users in areas that have turned into fixed or storage spaces and proposes solutions to address these issues.

The primary goal of this research is to create a model for the sustainability of caravan culture and user satisfaction by establishing legislation specific to caravan users. This legislation should enable users to stay comfortably in designated park areas provided by the government, rather than inappropriately enclosing spaces for accommodation.

To achieve this goal, four research questions have been identified, aiming to find answers related to user satisfaction:

- I. Why is living in a caravan preferred over a home?
- II. How can caravans provide a sense of home in mobile environments?

- III. How can users create different functions in their caravans through various organizations?
- IV. What is the environmental impact of caravan users in their accommodation areas?

In summary, the findings of the research, answers to the research questions, recommendations for future studies, and guidelines are presented in the sixth section. The main purpose is to establish legislation for the sustainability of caravan culture and user satisfaction, allowing users to stay in designated park areas rather than inappropriately enclosing spaces. The research aims to consider user expectations and satisfaction to create a sense of belonging in this new living space. Factors influencing caravan design and the evolution of homes into caravans based on user needs are explored. The study also delves into the relationship between user satisfaction and the open, semi-open, and closed spaces in caravans.

Why is living in a caravan preferred over a traditional house: Caravan users, based on their employment status, marital status, and the psychological impact of caravans on users, have expressed a preference for living in caravans to escape urban density and enjoy a serene environment close to nature. This desire is considered crucial for the caravan culture. The absence of a designated park area for users, despite the evaluation results showing that a significant number of users engage in continuous or seasonal accommodation, prevents them from realizing their desire to be close to nature. In this context, users perceive their caravans as psychological support, providing a sense of

relaxation away from urban hustle and bustle. To preserve and sustain caravan culture, the appreciation of having a designated park area for users is crucial (Section 3.5).

Users do not make extensive use of the interior organization and space in caravans (Section 4.6). Due to the lack of infrastructure in designated park areas to meet basic needs, users have converted semi-open or open spaces into enclosed areas, living there illegally. Consequently, users attempt to create a sense of home by inappropriately enclosing areas, causing harm to both the environment and caravan culture. In this context, having specific legislation would put an end to inappropriate enclosure practices, and users could achieve a sense of home by utilizing interior space more within their designated park area. Users would value the existence of a constrained area for their satisfaction.

How can users create different functions in their caravans through various organizations: Users from six different regions visited during the study generally use their caravans for various functions through different organizations. Some users have solved the toilet section externally due to the availability of infrastructure for waste management, while others have combined relaxation and sleeping areas in the same organization. Overall, users use seating areas in their caravans as sleeping areas. Therefore, the inappropriate enclosure of semi-open and open spaces is closely related to the lack of specific legislation and legal rights. If a law is in place, users can use different functions within their caravans for user satisfaction.

What is the environmental impact of caravan users in their accommodation areas: With the prominence of sustainable caravans, future legislation can be based on new technologies and design techniques that minimize environmental issues, promoting sustainable caravan living. The study concludes that commonly used batteries and generators for mobile electricity needs are not environmentally friendly. Instead, the adoption of eco-friendly wastewater treatment systems, water supply improvements, and infrastructure enhancements in park areas are recommended. This strategy aims to meet mobile energy needs sustainably while efficiently reducing environmental impacts.

Local governments, municipalities, and the state are recommended to make improvements based on this thesis. The suggestions derived from the study's findings provide specific ideas for enhancing procedures related to caravans for towns and local governments. The study emphasizes the benefits of caravan culture on the social, cultural, and tourism aspects of the Turkish Republic of Northern Cyprus, aiming to improve caravan culture in the region and prevent its extinction. In conclusion, significant perspectives are presented for the long-term preservation of caravan culture in the region, along with government support for users, specific legislation, and designated park areas. Highlighting its possible advantages for the dynamics of tourism. suggestions regarding the satisfaction of caravanners for municipalities in the Northern Cyprus region

Further study can be conducted to find solutions to housing problems that may arise in the event of a possible disaster or epidemic in Cyprus. This study may focus on the use of caravans as living spaces and the evaluation of user satisfaction in solving this living problem. Caravans can quickly meet emergency housing needs and provide temporary shelter. However, understanding the extent to which users are satisfied with such accommodations and identifying specific factors for improvement may be necessary. These factors may include the level of comfort, safety, social and physical infrastructure provided by caravans. This study could be a significant step in evaluating the availability of caravans for meeting emergency housing needs and how effective users find this solution.

REFERENCES

- Akgül, A. (2006). *Mimarlıkta Mobilite Kavramı: Göçebe Çingeler ve Sirk Yaşamı Üzerine Bir İnceleme* (Doctoral dissertation, Fen Bilimleri Enstitüsü).
- Altan, Z. B. (2007). *Belgesel film çekim ekibi için tasarlanan minimum ölçekte mobil mekan araştırma ve incelemesi* (Master's thesis, [yy]).
- Aluçlu, İ. (2000). Özel sektör yönetim binalarında (holdinglerde) kullanıcı gereksinimi, konfor şartları ve organizasyona yönelik sistem iyileştirme modeli.
- Anson, A. (2014). "The world is my backyard": Romanticization, thoreauvian rhetoric, and constructive confrontation in the tiny house movement. In *From sustainable to resilient cities: Global concerns and urban efforts* (Vol. 14, pp. 289-313). Emerald Group Publishing Limited.
- Arı, E. (2019). *Mobil mekan kavramı kapsamında taşınabilir mekan organizasyonu* (Doctoral dissertation, Necmettin Erbakan University (Turkey)).
- Arslan, S. (2006). Orta Nitelikli Konut Salonlarının İç Mekân Analizi. *Gazi Üniversitesi Fen Bilimleri Enstitüsü*.
- Balkan, E. A. (2004). Mimari Tasarımda Ekolojik Yaklaşımlar. *Mimar-ist Dergisi*, 12.
- Bayazıt, N. (2008). *Tasarımı Anlamak*. İstanbul: İdeal Kültür Yayıncılık.

Beckwith, J. A. (1998). The role of caravan parks in meeting the housing needs of the aged. *Urban Policy and Research*, 16(2), 131-137.

Buldaç, M. (2021). Küresel salgın sürecinde değişik mekân arayışı: Karavan ve kullanıcı deneyimleri. *Yıldız Journal of Art and Design*, 8(2), 90-104.

Buldaç, M. (2021). Pandemi sürecinde uzaktan eğitim modeli: İç mimarlık eğitiminde öğrenci deneyimleri. *Modular Journal*, 4(1), 71-91.

Birthley, N. (2001). An Introduction To Modern Vehicle Design. Chapter 4. Body Design: The Styling Process. *Publication Of: Butterworth-Heinemann Ltd.*

Chamberlain, C., & Mackenzie, D. (2014). *On the margins: permanent residents in caravan parks*. Department of Families, Housing, Community Services and Indigenous Affairs.

Çebi, A. (2023). *Mikro konutları yeniden okumak: tekerlekli taşınabilir mikro konut tasarımları üzerine bir değerlendirme* (Master's thesis, Işık Üniversitesi).

Çelikkilek, G. (2019). Karavan yalıtımı nasıl yapılır [Blog yazısı]. *Erişim Tarihi*, 4, 2022.

Ching, F. D. (2023). *Architecture: Form, space, and order*. John Wiley & Sons.

- Çolak, A. F. (2005). *Mobil Konutların Türkiye'deki Uygulanabilirliğinin İrdelenmesi* (Doctoral dissertation, Fen Bilimleri Enstitüsü).
- Davidson, H. A. (1973). Housing demand: mobile, modular, or conventional. (*No Title*).
- Doğan, C., & Altan, O. (2007). Kamusal alanda oturma eylemi ve ergonomik ilkeler. *Megaron YTÜ Mim. Fak. E-Dergisi*, 2(3), 159-166.
- Gürtekin, F. B. (2011). Mobil mekan kapsamında karavan-treyler tasarımının iç mekan organizasyonu yönünden incelenmesi. *Ankara: Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü, Yüksek Lisans Tezi*.
- Cantarella, L., & Guallart, V. (2005). Media House Project: The House is the Computer, the Structure the Network. *Actar (March 1, 2005)*.
- Hamilton, B. (2004). The influence of demographic trends on housing demand in the United States: A descriptive analysis.
- Harloe, M. (2008). *The people's home: social rented housing in Europe and America*. John Wiley & Sons.
- Hughes-Stanton, C. (1967). *Transport Design*. New York: Reinhold Publishing Corporation.

- Koçhan, A., Colak, A., Uzun, T., Berkman, A. N., Yegin, M., & Gunes, E. (2011). Semantic Link with the Natural Environment: Sustainable and Healthy Artificial Environments for Hot-Humid and Warm-Humid Climates. *Volume 12 Sustainable Cities and Regions*, 3026.
- Kahya, M. (1993). *Endüstrileşmenin ve teknolojik gelişmelerin konut iç mekan düzenine etkileri* (Doctoral dissertation).
- Kaya, H. F. (2010). *Kapalı ofis sistemlerinde mekânsal kalitenin kullanıcıların algısal performansı üzerine etkileri* (Doctoral dissertation, Master Thesis, Ankara Gazi University).
- Leivestad, H. H. (2017). CAMPSITE MIGRANTS. *Nordic Journal of Migration Research*, 7(3), 181-188.
- Nelligan, T., Polsley, S., Ray, J., Helms, M., Linsey, J., & Hammond, T. (2015, March). Mechanix: A sketch-based educational interface. In *Proceedings of the 20th International Conference on Intelligent User Interfaces Companion* (pp. 53-56).
- Okay, S. (2015, November 20). Karavan Kampinglerimiz. Wordpress. Erişim tarihi: 29 Kasım 2020, <https://sevilokay.wordpress.com/2015/11/20/karavan-kampinglerimiz-husniye-ve-ahmet-10/>.

- Onur, S. (2000). Mobilya biçimlenişine etki eden faktörler ve tasarımcı kullanıcı faktörü üzerine bir yöntem önerisi.
- Ötügen, E. (2010). Eco tourism and caravan tourism. In *International Symposium on the Biology of Rare and Endemic Plant Species*. Ankara: Orta Doğu Teknik Üniversitesi.
- Önder, S., & Suri, L. (2022). Comfort and design in mobility. *Journal of Architectural Sciences and Applications*, 7(1), 26-41.
- Rose, P., Beeby, J., & Parker, D. (1995). Academic rigour in the lived experience of researchers using phenomenological methods in nursing in nursing. *Journal of Advanced Nursing*, 21(6), 1123-1129.
- Tetlow, K. (1999). Mobile Home, Master Tezi, University of Manitoba, Winnipeg Manitoba.
- Torun, F. K. (2023). Mobil Mekânlar Kapsamında İç Mimarlık Perspektifinden Karavan Tasarım Önerileri. *International Journal Of Social Humanities Sciences Research*, 10(98), 2082-2099.
- Tuncel, A. (2007). *Mobil konutlarda iç mekân organizasyonu ve mobil mekânların tarihsel gelişim süreci* (Master's thesis, [yy]).

Woodmansey, A. (2022). Recreational Vehicles: A World History 1872-1939. *Recreational Vehicles*, 1-208.

Wickersham, J. (2002). *The Caravan Handbook: Buying, Owning, Enjoying*.

URL 1: <https://hiddenarchitecture.net/the-homeless-vehicle/>

URL 2: <https://www.moving.com/tips/4-laws-on-moving-a-mobile-home-you-need-to-know/>

URL 3: <https://www.woodovis.com>

URL 4: <https://forums.aaca.org/topic/177141-curtiss-aerocar-land-yacht-with-auburn/>

URL 5: <http://www.abandonedcarsandtrucks.com/content/meet-1925-chevrolet-house-car>

URL 6: <https://www.trendhunter.com/trends/concept-caravan>

URL 7: <https://blog.bellostes.com/?cat=72&paged=2>

URL 8: <https://architizer.com/blog/inspiration/stories/a-machine-for-camping/>

URL 9: <https://forums.aaca.org/topic/177141-curtiss-aerocar-land-yacht-with-auburn/>

URL 10: <https://nationalmotormuseum.org.uk/collections/camec-collection/the-worlds-first-leisure-caravan/>

URL 11: <https://www.lealkaravan.com/moto-karavan/>

URL 12: <https://www.sparfell.aero/trade-your-aircraft/cabin-definition-design/>

URL 13: <https://www.sparfell.aero/trade-your-aircraft/cabin-definition-design/>

URL 14: <https://www.yorkcaravanpark.com/caravan-park-plan/>

URL 15: Weisnbergcompany.com

URL 16: <https://www.dalix.cz/files/dometic-air-conditioners.pdf>

URL 17: <https://www.kibrisgenctv.com/gazimagusa-belediyesi-silver-beach-plajindaki-karavanlara-mudahale-etti>

URL 18: <https://www.kibrisgenctv.com>

URL 19: <https://greenrv.com.au/going-green-on-the-go-eco-friendly-ways-to-live-off-the-grid-in-a-caravan/>

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APPENDICES

Appendix A: Information and Consent Form Voluntary Participation



Eastern Mediterranean University, Faculty of Architecture
Gazimağusa, Kuzey Kıbrıs Türk Cumhuriyeti
Tel: +(90) 392 630 1349 Faks: +(90) 392 630 2365 Web: <https://farc.emu.edu.tr/en>

INFORMATION AND CONSENT FORM FOR VOLUNTARY PARTICIPATION

Dear participant,

Before agreeing to participate in the study, please take a few moments to carefully read the information below about the study. If you have any questions about the research, you can contact the researcher with the contact information below. This research will be carried out by Eastern Mediterranean University architecture faculty interior architecture graduate student A. Oytun KAYAN, it is carried out under the responsibility of Prof.Dr.Kağan GÜNÇE. The subject of the research is the caravan organization as a mobile area in terms of user satisfaction. The purpose of the research is to investigate the interior organization of the caravans and user satisfaction. The study will take a maximum of 45-60 minutes. Your participation in the study is not mandatory and you have the right to refuse to participate. You have the right to withdraw from the study at any time without explanation. If you withdraw from the research, your answers will be destroyed and will not be used in the research. If you agree to participate and complete the research, the answers and questionnaires will be kept confidential. Your name and identifying information will be stored separately from the rest of the survey. Data will be retained for a maximum of 6 years after the research is completed. After the analysis of the data, a report on the research can be published.

Title of Research: Caravan organization as a mobile area in terms of user satisfaction
Araştırmacıların Adları: Prof.Dr. Kağan GÜNÇE / Oytun KAYAN

Contact; kağan.gunce@emu.edu.tr – Graduate education and research institute - AT107

oytun.kayan@emu.edu.tr – Eastern mediterranean university architecture faculty office building - ARCH 017

CONSENT FORM

To indicate your voluntary participation, please read the items below and sign the informed consent form.

- I agree to voluntarily participate in this research study.
- The purpose and nature of the study was explained to me in writing and I find it easy to ask questions for research.
- I agree to have my conversation recorded
- I understand that my identity will not be disclosed in any report on the results of this research.
- I understand that excerpts from my interview can be quoted in the thesis and I see no problem with their publication.
- I understand that I have the right to access the information I provide at any time.
- I understand that I am free to communicate with any person involved in the research.

Signature of the Participant:

Date:

I believe that the participant gave informed consent to participate in this study.

Investigator's Signature:

Date:

If you have a concern about the ethics of the research, please send a written text describing your concern in detail and the Chairman of the Research and Ethics Committee of the Eastern Mediterranean University Faculty of Architecture, Prof.Dr. You can contact Özgür DİNÇYÜREK (ozgur.dincyurek@emu.edu).

Appendix.1. Voluntary participant form

Appendix.2. Ethical form

Appendix.3. Questions

Appendix B: Sample of Turkish Questionnaire

1) Cinsiyetiniz nedir?

a) Kadın

b) Erkek

2) Yaşınız kaçtır?

a) 18 – 30 yaş aralığı

b) 31 – 40 yaş aralığı

c) 41 – 50 yaş aralığı

d) 51 - 60 yaş aralığı

e) 61 yaş ve üzeri

3) Medeni durumunuz nedir?

a) Evli

b) Boşanmış

c) Dul

d) Bekar

e) Diğer (belirtiniz)

4) Eğitim durumunuz nedir?

a) Yok

b) İlk okul mezunu

c) Orta okul mezunu

d) Lise mezunu

e) Üniversite mezunu

f) Master mezunu

g) Doktora mezunu

h) Diğer (belirtiniz)

5) Herhangi bir işte çalışıyor musuz?

a) Çalışıyorum

b) Çalışmıyorum

c) Emekliyim

d) Diğer (belirtiniz)

6) Mesleğiniz nedir?

a) Çiftçi

b) Teknisyen

- c) Eğitici
- d) Sanatçı
- e) Esnaf
- f) İşletmeci
- g) Memur
- h) Diğer (belirtiniz).....

7) Çalıştığınız yerde ki pozisyonunuz nedir?

- a) İşçi
- b) Personel
- c) Topluluk lideri
- d) Yönetici
- e) Diğer (belirtiniz)

8) Karavanda yaşamayı tercih etme sebebiniz nedir?

- a) Küçük olmasının avantajlarından
- b) Kolay sosyalleşme ortamına sahip olduğundan
- c) Kalabalık şehirlerden uzaklaşma tercihinden
- d) İş yoğunluğundan uzaklaşma isteğinden
- e) Diğer (belirtiniz)

9) Karavanınız türü(motorlu-motorsuz) nedir?

- a) Çekmeli karavan (Motorsuz)
- b) Sökülüp takılmalı karavan (Motorsuz)
- c) Kendinden taşınabilir karavan (Motorlu)
- d) Taşınabilir karavan (Motorlu)
- e) Diğer (belirtiniz)

10) Karavanda yaşama amacınız(seçme sebebiniz) nedir?

- a) Sosyalleşme
- b) Tatil yapma
- c) Günübirlik sosyalleşme
- d) Zorunluluk (belirtiniz))
- e) Diğer (belirtiniz)

11) Karavan kullanımınız ne sıklıkla oluyor?

- a) Günübirlik
- b) Hafta içi - Hafta sonu
- c) Sezonluk
- d) Sürekli (Sürekli yaşam alanı olarak)
- e) Diğer (belirtiniz)

12) Karavanınızla nerede konaklamayı tercih edersiniz?

- a) Dağlık araziler
- b) Deniz kenarı (kıyı şeridi)
- c) Ova
- d) Diğer (belirtiniz)

13) Karavanınızla nerede konaklamaktasınız?

- a) Karavan parkında konaklama Yapıyorum
- b) Bulabildiğim herhangi bir alanda konaklıyorum
- c) Şahsime ait olan arazide konaklıyorum

d) Diğer (belirtiniz)

14) Karavanınızla sıklıkla konaklamayı tercih ettiğiniz bölge neresidir? (Belirtiniz)

a) Gazimağusa (belirtiniz

b) Karpaz (belirtiniz

c) Girne (belirtiniz

d) Lefkoşa (belirtiniz

e) Diğer (belirtiniz

15) Karavanınız hangi mevsimde daha keyifli kullanıyorsunuz?

a) İlkbahar (Mart – Nisan – Mayıs)

b) Yaz (Haziran – Temmuz – Ağustos)

c) Sonbahar (Eylül – Ekim - Kasım)

d) Kış (Aralık – Ocak – Şubat)

e) Diğer (belirtiniz)

16) Karavan ortamını nasıl yaşıyor ve değerlendiriyorsunuz?

a) Sosyalleşme - eğlenme ortamı olarak

b) Aileyle zaman geçirme ortamı olarak

c) Doğa ile baş başa kalma ortamı olarak

d) Sakinleşme ve sosyal ortamdan izole olma ortamı olarak

e) Diğer (belirtiniz)

17) Karavanınızın iç mekanı sizi kısıtlıyor mu?

a) Evet (belirtiniz

b) Hayır (belirtiniz

c) Bazen (belirtiniz

18) Karavan iç mekan kullanımınız hangi zaman diliminde fazladır?

- a) Sabah
- b) Öğlen
- c) Akşam
- d) Gece
- e) Diğer (belirtiniz)

19) Karavan iç mekan kullanımınız ne sıklıkla olmaktadır?

- a) 1 saatten az
- b) 1 - 6 saat arası (belirtiniz))
- c) 7 - 13 saat arası (belirtiniz))
- d) 14 - 20 saat arası (belirtiniz))
- e) Diğer (belirtiniz))

20) Hangi amaçlarda karavanınızın iç mekanlarını kullanmaktasınız?

- a) Komşuluk ilişkilerinde (sosyalleşmeye yönelik)
- b) Soğuk hava şartlarında (ısınmaya yönelik)
- c) Sıcak hava şartlarında (serinlemeye yönelik)
- d) Yemek ve dinlenmeye yönelik
- e) Diğer (belirtiniz))

21) Karavanınızın iç mekan sirkülasyonunun nasıl sağlamaktasınız?

- a) Karavanda bulunan pencerelerle
- b) Karavanda bulunan hava vantilatörleriyle
- c) Karavan içine monte edilen pervanelerle
- d) Karavanda bulunan klimalarla
- e) Diğer (belirtiniz))

22) Karavanınızın kaç pencere boşluğu bulunmaktadır?

- a) 1-2 adet
- b) 2-4 adet
- c) 4-6 adet
- d) 6-8 adet
- e) Diğer (belirtiniz)

23) Karavanınızın iç mekanında hangi alanı daha çok kullanmaktasınız?

- a) Mutfak alanı
- b) Oturma alanı
- c) Yatak alanı
- d) Yarı açık alanı
- e) Diğer (belirtiniz

24) Karavanınızda iç mekan aydınlatmasını nasıl sağlamaktasınız?

- a) Güneş enerjili lambalar kullanmaktayım
- b) Araç içi elektrik sistemine sahibim
- c) Kablo yoluyla karavan çevresine yerleştirilen elektrik bağlantılarından
- d) Pilli ışıklar veya mum yoluyla
- e) Diğer (belirtiniz)

25) Karavanınızın mutfak bölümünü ne sıklıkla ve ne amaçlar için kullanmaktasınız?

- a) 1 saatten az (belirtiniz
- b) 1 - 6 saat arası (belirtiniz
- c) 7 - 13 saat arası (belirtiniz
- d) 14 - 20 saat arası (belirtiniz
- e) Diğer (belirtiniz
- f)

26) Karavanınızın mutfak bölümünde kaç adet depolama alanı mevcuttur ve yeterli mi? Belirtiniz.

- a) 1 (belirtiniz)
- b) 1 – 4 arası (belirtiniz)
- c) 5 – 8 arası (belirtiniz)
- d) 9 – 11 arası (belirtiniz)
- e) Diğer (belirtiniz)

27) Karavanınızın mutfak bölümünde hangi materyaller kullanılmaktadır?

- a) Ahşap
- b) Pvc
- c) Çelik
- d) Mermer
- e) Diğer (belirtiniz)

28) Karavanınızın mutfak bölümünde yemek yapımı nasıl sağlanmaktadır?

- a) Mikrodalgayla
- b) Mini fırınla
- c) Elektrikli ocakla
- d) Gazlı fırınla
- e) Diğer (belirtiniz)

29) Karavanınızın mutfak bölümünde gıdalar nasıl saklanmaktadır?

- a) Portatif buzdolabıyla
- b) Mini buzdolabıyla
- c) Büyük karavan buzdolabıyla
- d) Saklama kaplarıyla (belirtiniz)
- e) Diğer (belirtiniz)

- 30) Karavanınızın mutfak bölümünde ne çeşit eviye kullanımına sahipsiniz?
- a) Eviye kullanmamaktayım (belirtiniz)
 - b) Kapaklı eviye kullanmaktayım
 - c) Kapaksız eviye kullanmaktayım
 - d) Sadece musluk olarak kullanmaktayım
 - e) Diğer (belirtiniz)
- 31) Karavanınızın oturma bölümünü ne sıklıkla ve ne amaçlar için kullanmaktasınız?
- a) 1 saatten az. (belirtiniz)
 - b) 1 - 6 saat arası (belirtiniz)
 - c) 7 - 13 saat arası (belirtiniz)
 - d) 14 - 20 saat arası (belirtiniz)
 - e) Diğer (belirtiniz)
- 32) Karavanınızın oturma bölümü farklı fonksiyonlar için kullanılabilir mi?
- a) Evet (belirtiniz)
 - b) Hayır (belirtiniz)
- 33) Karavanınızın oturma bölümünü farklı fonksiyonlar için kullanmakta mısınız?
- a) Oturma masası katlanarak mutfak oluşturabilmektedir.
 - b) Oturma alanı yatak bölümüne dönüşebilir
 - c) Oturma alanı saklanabilir ve alan açmak için yarar sağlayabilmektedir.
 - d) Hayır kullanılmamaktadır
 - e) Diğer (belirtiniz)
- 34) Karavanınızın oturma bölümünü kaç kişi kullanabilmektedir?
- a) 1 Kişi kullanabilmektedir.
 - b) 2-3 Kişi kullanabilmektedir.
 - c) 4-5 Kişi kullanabilmektedir.
 - d) 6-7 Kişi kullanabilmektedir.

e) Diğer (belirtiniz)

35) Karavanınızın yatak bölümünü ne sıklıkla kullanmaktasınız?

- a) 1 saatten az (belirtiniz))
- b) 1 - 6 saat arası (belirtiniz))
- c) 7 - 13 saat arası (belirtiniz))
- d) 14 - 20 saat arası (belirtiniz))
- e) Diğer (belirtiniz)

36) Karavanınızın yatak bölümünü hangi amaçlar için kullanmaktasınız?

- a) Sadece uyumak için kullanıyorum
- b) Oturma alanı olarak da kullanıyorum
- c) Yemek yeme alanı olarak da kullanıyorum
- d) Sosyalleşmek için kullanıyorum (Televizyon izlemek, film izlemek, kitap okumak vb.....)
- e) Diğer (belirtiniz)

37) Karavanınızın yatak bölümünde ne çeşit bir yatak kullanmaktasınız?

- a) Katlanabilir yatak çeşidi
- b) Çok yönlü katlanabilir ve koltuk formuna geçebilen yatak çeşidi
- c) Sabit yatak çeşidi
- d) Koltuk olarak kullanılabilir çok yönlü yatak çeşidi
- e) Diğer (belirtiniz)

38) Karavanınızın yatak bölümü farklı fonksiyonlar için kullanılmakta mı?

- a) Yatak bölümü depolama alanı olarak kullanılabilir/mektedir
- b) Yatak bölümü oturma alanına dönüşebilmektedir.
- c) Yatak bölümü tamamen saklanılabilir ve alan açılımı sağlanabilir.
- d) Hayır kullanılmamaktadır
- e) Diğer (belirtiniz)

39) Karavanınızda eşyalarınızı düzenli olarak nereye koymaktasınız? (Kıyafetler, makyaj malzemeleri, saat, telefon vb.....)

- a) Yatak bölümünde bulunan dolaplara koyulabilir
- b) Oturma alanında bulunan dolaplara koyulabilir
- c) Mutfak bölümünde bulunan depolama yerlerine veya dolaplara koyulabilir
- d) Katlı bir şekilde çanta veya koltukların alt gözlerine koyulabilir
- e) Diğer (belirtiniz)

40) Karavanınızın tuvalet ve duş bölümünü iç mekan da mı yoksa dış mekan da mı çözümlediniz?

- a) İç mekan da çözümledim
- b) Dış mekan da çözümledim
- c) Diğer (belirtiniz)

41) Karavanınızın tuvalet bölümünü ne sıklıkla kullanmaktasınız?

- a) 1 saatten az (belirtiniz))
- b) 1 - 6 saat arası (belirtiniz))
- c) 7 - 13 saat arası (belirtiniz))
- d) 14 - 20 saat arası (belirtiniz))
- e) Diğer (belirtiniz)

42) Karavanınızın tuvalet bölümünde ne çeşit tuvalet kullanmaktasınız?

- a) Ayrı bir alan olarak tuvalet bölümüne sahibim
- b) Portatif olarak tuvalet bölümüne sahibim
- c) Banyo kabini kullanmaktayım(yatak bölümü veya oturma bölümü altına saklanan)
- d) Kompost tuvalet (Kendi atığını temizleyebilen)
- e) Diğer (belirtiniz)

43) Karavanınızın tuvalet bölümünde su nereden karşılanmaktadır?

- a) Aracın dışından bulunan su depolarından
- b) Ek olarak bidonlara doldurulan sularla
- c) Dış su dolum kapağıyla
- d) Hidrofor desteğiyle
- e) Diğer (belirtiniz)

44) Karavanınızın tuvalet bölümünde kirli ve temiz su tanklarının doluluğu nereden anlaşılır?

- a) Araç içinde bulunan manual analoglarla
- b) Tank üzerinde bulunan göstergelerle
- c) Dijital araç içine bağlanan göstergelerle
- d) Kullanıcıların kendileri tankların kontrol etmesiyle
- e) Diğer (belirtiniz)

45) Karavanınızın tuvalet bölümünde ki atıklar nasıl dışarı atılmaktadır?

- a) Maceratör adı verilen pompa desteğiyle
- b) Karavan altında bulunan depolama alanında
- c) Sıvı desteğiyle atık su deposuna atılarak (100 litre)
- d) Kompost tuvalet sistemi kullanmaktayım.
- e) Diğer (belirtiniz)

46) Karavanınızın duş bölümünde sıcak-soğuk su kontrolü nasıl sağlanmaktadır?

- a) Sıcak su için bir çözümüm yok
- b) Güneş panelleri kullanmaktayım
- c) Isıtıcı kullanmaktayım
- d) Elektrikli kombi sistemi kullanmaktayım
- e) Diğer (belirtiniz)

47) Karavanınızla bulunduğunuz bölgede su ihtiyacını nasıl sağlamaktasınız?

- a) Araçta bulunan su tanklarıyla
- b) Çevre yerleşkelerde bulunan sulak yerlerden taşıma yoluyla
- c) Hidrofor sistemiyle
- d) Belirli gün veya saatlerde su depolanarak
- e) Diğer (belirtiniz)

48) Karavanınızın yarı-açık alanı sizi kısıtlıyor mu?

- a) Evet (belirtiniz))
- b) Hayır (belirtiniz))
- c) Bazen (belirtiniz))

49) Karavanınızın yarı-açık mekanını hangi zamanlarda sıklıkla kullanmaktasınız?

- a) Sabah
- b) Öğlen
- c) Akşam
- d) Gece
- e) Diğer (belirtiniz)

50) Gün içinde yarı-açık mekan kullanımınız ne sıklıkla olmaktadır?

- a) 1 saatten az
- b) 1 - 6 saat arası (belirtiniz))
- c) 7 - 13 saat arası (belirtiniz))
- d) 14 - 20 saat arası (belirtiniz))
- e) Diğer (belirtiniz),

51) Karavanınızın yarı-açık mekanını daha çok hangi amaçlar için kullanmaktasınız?

- a) Yemek yapmak amacıyla kullanmaktayım
- b) Oturma alanı olarak kullanmaktayım
- c) Yatak alanı olarak kullanmaktayım

- d) Sadece dinlenme amacı için kullanmaktayım
- e) Diğer (belirtiniz

52) Karavanınızın yarı-açık mekanında hava şartları için kendinizi nasıl korumaktasınız?

- a) Karavanla bütün olan tenteler sayesinde
- b) Kurulum isteyen tentelerle
- c) Büyük kurulum isteyen şemsiyelerle
- d) Doğal şartlarla korunmaktayım (gölge alanlar, üstü kapalı alanlar vb....)
- e) Diğer (belirtiniz

53) Gün içinde yarı-açık mekanınızın oturma alanı olarak kullanımınız ne sıklıkla olmaktadır?

- a) 1 saatten az
- b) 1 - 6 saat arası (belirtiniz
- c) 7 - 13 saat arası (belirtiniz
- d) 14 - 20 saat arası (belirtiniz
- e) Diğer (belirtiniz)

54) Karavanınızın yarı-açık mekan aydınlatması nasıl sağlanmaktadır?

- a) Güneş enerjili lambalar kullanmaktayım
- b) Güneş panellerine sahibim
- c) Kablo yoluyla karavan çevresine yerleştirilen elektrik bağlantılarından yararlanıyorum.
- d) Pilli ışıklar veya mum yoluyla
- e) Diğer (belirtiniz)

55) Karavanınız dış mekanı sizi kısıtlıyor mu

- a) Evet (belirtiniz
- b) Hayır (belirtiniz

c) Bazen (belirtiniz)

56) Karavanınızın dış mekan kullanımınız hangi zaman diliminde daha çoktur?

- a) Sabah
- b) Öğlen
- c) Akşam
- d) Gece
- e) Diğer (belirtiniz)

57) Gün içinde karavanınızın dış mekanını ne sıklıkla kullanmaktasınız?

- a) 1 saatten az
- b) 1 - 6 saat arası (belirtiniz)
- c) 7 - 13 saat arası (belirtiniz)
- d) 14 - 20 saat arası (belirtiniz)
- e) Diğer (belirtiniz)

58) Hangi amaçlarda karavanınızın dış mekanını kullanmaktasınız?

- a) Komşuluk ilişkilerinde (sosyalleşmeye yönelik)
- b) Soğuk hava şartlarında
- c) Sıcak hava şartlarında (serinlemeye yönelik)
- d) Yemek yemek ve dinlenme amacı altında
- e) Diğer (belirtiniz)

59) Gün içinde dış mekan aktiviteleriniz neler olmaktadır?

- a) Çevrede bulunan kullanıcılarla beraber sosyalleşmek
- b) Oturma alanı olarak kullanmaktayım
- c) Yatak alanı olarak kullanmaktayım
- d) Sadece dinlenme amacı için kullanmaktayım
- e) Diğer (belirtiniz)

60) Karavanınızın dış mekan aydınlatması nasıl sağlanmaktadır?

- a) Güneş enerjili lambalar kullanmaktayım
- b) Güneş panellerine sahibim
- c) Kablo yoluyla karavan çevresine yerleştirilen elektrik bağlantılarından yararlanıyorum.
- d) Pilli ışıklar veya mum yoluyla
- e) Diğer (belirtiniz)

61) Bulduğunuz ortamda elektrik ihtiyacınızı nasıl sağlamaktasınız?

- a) Araçta bulunan jeneratörlerle
- b) Güneş panelleriyle
- c) Akü Yardımıyla
- d) Pilli veya güneş enerjili elektrikli aletler kullanılarak
- e) Diğer (belirtiniz)

62) Pandemi sürecince karavanınız da mı konakladınız? Neden?

63) Karavanınızla yurt dışı seyahat yaptınız mı? Yaptıysanız nerelerde konakladınız?

64) Karavanları güvenli buluyor musunuz? (Doğal afet ve güvenlik açısından)

65) Karavanınız kalabalık bir aile ortamı için konaklamaya uygun mu? Esnek kullanımlara açık mı?

Appendix C: Sample of English Questionnaire

1) What is your gender?

a) Woman

b) Male

2) How old are you?

a) 18 – 30 years old

b) 31 – 40 years old

c) 41 – 50 years old

d) 51 - 60 years old

e) 61 years and over

3) What is your marital status?

a) Married

b) Divorced

c) Widow

d) Single

e) Other (specify)

4) What is your education status?

a) None

b) Primary school graduate

c) Secondary school graduate

d) High school graduate

e) University graduate

f) Master's graduate

g) Ph.D. graduate

h) Other (specify)

5) Do you work in any job?

a) I am working

b) I am not working

c) I am retired

d) Other (specify)

6) What is your profession?

a) Farmer

- b) Technician
- c) Educator
- d) Artist
- e) Tradesmen
- f) Operator
- g) Officer
- h) Other (specify).....

7) What is your position where you work?

- a) worker
- b) Personnel
- c) Community leader
- d) Manager
- e) Other (specify)

8) What is your reason for choosing to live in a caravan?

- a) One of the advantages of being small
- b) Because it has an easy socializing environment
- c) Preferring to stay away from crowded cities

d) From the desire to get away from the workload

e) Other (specify)

9) What is the type of your caravan (motorized or non-motorised)?

a) Trailer Caravan (Without Motor)

b) Dismountable caravan (without motor)

c) Self-portable caravan (Motorized)

d) Portable caravan (Motorized)

e) Other (specify)

10) What is your purpose (reason for choosing) to live in the caravan?

a) Socialization

b) Don't take a vacation

c) Daily socialization

d) Obligation (specify)

e) Other (specify)

11) How often do you use your caravan?

a) Daily

- b) Weekday - Weekend
- c) Seasonal
- d) Continuous (As a permanent habitat)
- e) Other (specify)

12) Where would you prefer to stay with your caravan?

- a) Mountainous lands
- b) Seaside (coastalline)
- c) Plain
- d) Other (specify)

13) Where do you stay with your caravan?

- a) I am staying in the caravan park
- b) I stay in any area I can find
- c) I am staying on the land that belongs to me
- d) Other (specify)

14) Which region do you prefer to stay with your caravan? (specify)

- a) Famagusta (specify

- b) Karpas (specify)
- c) Kyrenia (specify)
- d) Nicosia (specify)
- e) Other (specify)

15) In which season do you use your caravan more enjoyable?

- a) Spring (March – April – May)
- b) Summer (June – July – August)
- c) Autumn (September – October – November)
- d) Winter (December – January – February)
- e) Other (specify)

16) How do you live and evaluate the caravan environment?

- a) Socializing - as an entertainment environment
- b) As an environment to spend time with family
- c) As an environment to be alone with nature
- d) As an environment of calm and isolation of social life
- e) Other (specify)

17) Does it restrict your caravan interior space?

a) Yes (specify)

b) No (specify)

c) Sometimes (specify)

18) What time period is your caravan interior use used in?

a) Morning

b) Noon

c) Evening

d) Night

e) Other (specify)

19) What is your caravan interior use?

a) Less than 1 hour

b) Between 1 - 6 hours (specify)

c) Between 7 - 13 hours (specify)

d) Between 14 - 20 hours (specify)

e) Other (specify)

20) What purposes do you use the interiors of your caravan?

- a) Neighborhood welcoming (for socializing)
- b) In cold weather conditions (for heating)
- c) In hot weather conditions (for cooling)
- d) For food and rest
- e) Other (specify)

21) How do you manage the indoor circulation of your caravan?

- a) With windows in the caravan
- b) With the air fans in the caravan
- c) With propellers mounted inside the caravan
- d) With the air conditioners in the caravan
- e) Other (specify)

22) How many window bay does your caravan have?

- a) 1-2 pieces
- b) 2-4 pieces
- c) 4-6 pieces
- d) 6-8 pieces

e) Other (specify)

23) Which area do you use more in the interior of your caravan?

a) Kitchen area

b) Sitting area

c) Bed area

d) Semi-open area

e) Other (specify)

24) How do you achieve indoor lighting in your trailer?

a) I use solar powered lamps

b) I have an in-vehicle electrical system

c) From electrical connections placed around the caravan via cable

d) Via battery lights or candle

e) Other (specify)

25) What parts of the kitchen section of your caravan do you use and for what purposes?

a) Less than 1 hours (specify)

- b) Between 1 - 6 hours (specify
- c) Between 7 - 13 hours (specify
- d) Between 14 - 20 hours (specify
- e) Other (specify

26) How many storage spaces are there in the kitchen section of your caravan and is it sufficient? Please specify.

- a) 1 (specify
- b) 1 to 4 (specify
- c) 5 to 8 (specify
- d) 9 – 11 (specify
- e) Other (specify)

27) What materials are used in the kitchen section of your caravan?

- a) Wood
- b) PVC
- c) Steel
- d) Marble
- e) Other (specify)

28) How is cooking provided in the kitchen section of your caravan?

- a) By microwave
- b) With a mini oven
- c) With electric cooker
- d) With gas oven
- e) Other (specify)

29) How is the food stored in the kitchen area of your caravan?

- a) With a portable refrigerator
- b) With a mini fridge
- c) Large caravan with refrigerator
- d) With storage doors (specify)
- e) Other (specify)

30) What kind of sink are you trying to use in the kitchen section of your caravan?

- a) I use a sink (please specify)
- b) I use it in the house with a cover
- c) I use it at home without a cover
- d) I only use it as a faucet

e) Other (specify)

31) What parts of the seating area of your caravan and for what purpose do you use it?

a) Less than 1 hour. (specify)

b) 1 to 6 hours (specify))

c) Between 7 - 13 hours (specify))

d) Between 14 - 20 hours (specify))

e) Other (specify)

32) Can the seating area of your caravan be used for different functions?

a) Yes (specify)

b) No (specify)

33) Do you use the sitting part of your caravan for different functions?

a) The sitting table can be folded to form the kitchen.

b) The sitting area can be converted into a bed section

c) Seating area can be hidden and can be useful for making space.

d) No, it is not used

e) Other (specify)

34) How many people can use the seating area of your caravan?

a) 1 person can use it.

b) 2-3 people can use it.

c) It can be used by 4-5 people.

d) 6-7 people can use it.

e) Other (specify)

35) How often do you use the bed part of your caravan?

a) Less than 1 hour (specify)

b) 1 to 6 hours (specify)

c) Between 7 - 13 hours (specify)

d) Between 14 - 20 hours (specify)

e) Other (specify)

36) For what purposes do you use the bed part of your caravan?

a) I only use it to sleep

b) I also use it as a sitting area

- c) I also use it as a dining area
- d) I use it for socializing (watching TV, watching movies, reading books, etc.....)
- e) Other (specify)

37) What kind of bed do you use in the bed section of your caravan?

- a) Foldable bed type
- b) A bed type that can be folded and converted into a seat form.
- c) Fixed bearing type
- d) Versatile bed variety that can be used as a seat
- e) Other (specify)

38) Is the bed part of your caravan used for different functions?

- a) The bed section can be used as a storage area
- b) The bed section can be transformed into a sitting area.
- c) The bed section can be completely hidden and space can be opened.
- d) No, it is not used
- e) Other (specify)

39) Where do you regularly put your belongings in your caravan? (Clothes, make-up materials, watch, phone etc.....)

- a) It can be put in the cupboards in the bed section
- b) It can be put in the cabinets in the living area
- c) It can be put in the storage areas or cabinets in the kitchen section
- d) It can be put in the lower compartments of bags or seats in a folded manner.
- e) Other (specify)

40) Did you analyze the toilet and shower part of your caravan indoors or outdoors?

- a) I analyzed the interior
- b) I analyzed it outdoors
- c) Other (specify)

41) How often do you use the toilet section of your caravan?

- a) Less than 1 hour (specify)
- b) 1 to 6 hours (specify)
- c) Between 7 - 13 hours (specify)
- d) Between 14 - 20 hours (specify)
- e) Other (specify)

42) What kind of toilet do you use in the toilet section of your caravan?

- a) I have the toilet section as a separate area
- b) I have a portable toilet section
- c) I use a bathroom cabinet (hidden under the bed or sitting area)
- d) Compost toilet (which can clean its own waste)
- e) Other (specify)

43) Where does the water come from in the toilet section of your caravan?

- a) From the water tanks located outside the vehicle
- b) In addition to the water filled in the cans
- c) With outer water fill cap
- d) With booster support
- e) Other (specify)

44) How can you tell the fullness of the dirty and clean water tanks in the toilet section of your caravan?

- a) With the manual analogs in the vehicle
- b) With the indicators on the tank

- c) With indicators connected to the digital vehicle
- d) By the users themselves controlling the tanks
- e) Other (specify)

45) How is the waste in the toilet section of your caravan thrown out?

- a) With the support of a pump called Macerator
- b) In the storage area under the caravan
- c) By being thrown into the waste water tank with liquid support (100 liters)
- d) I use a compost toilet system.
- e) Other (specify)

46) How is hot-cold water control provided in the shower section of your caravan?

- a) I don't have a solution for hot water
- b) I use solar panels
- c) I am using a heater
- d) I am using an electric combi boiler system
- e) Other (specify)

47) How do you meet the water need in your region with your caravan?

- a) With the water tanks in the vehicle
- b) By transportation from wetlands located in the surrounding settlements
- c) With the booster system
- d) By storing water on certain days or hours
- e) Other (specify)

48) Does your caravan's semi-open space limit you?

- a) Yes (specify)
- b) No (specify)
- c) Sometimes (specify)

49) When do you often use the semi-open area of your caravan?

- a) one morning
- b) Noon
- c) Evening
- d) Night
- e) Other (specify)

50) How often do you use semi-open spaces during the day?

- a) Less than 1 hour
- b) 1 to 6 hours (specify)
- c) Between 7 - 13 hours (specify)
- d) Between 14 - 20 hours (specify)
- e) Other (specify),

51) For what purposes do you use the semi-open area of your caravan the most?

- a) I use it for cooking
- b) I use it as a sitting area
- c) I use it as a bed area
- d) I use it for entertainment purposes only
- e) Other (specify)

52) How do you protect yourself from the weather in the semi-open area of your caravan?

- a) Thanks to the awnings integrated with the caravan
- b) With awnings that require assembly
- c) With umbrellas that require large installation

d) I am protected by natural conditions (shady areas, enclosed areas, etc....)

e) Other (specify

53) How often do you use your semi-open area as a sitting area during the day?

a) less than 1 hour

b) 1 to 6 hours (specify

c) Between 7 - 13 hours (specify

d) Between 14 - 20 hours (specify

e) Other (specify)

54) How is semi-outdoor lighting provided for your caravan?

a) I use solar powered lamps

b) I have solar panels

c) I use the electrical connections placed around the caravan with cable.

d) Via battery lights or candle

e) Other (specify)

55) Does your caravan restrict you to the outdoors?

a) Yes (specify

b) No (specify)

c) Sometimes (specify)

56) In which time period do you use your caravan mostly outdoors?

one morning

b) Noon

c) Evening

d) Night

e) Other (specify)

57) How often do you use the outside of your caravan during the day?

a) Less than 1 hour

b) 1 to 6 hours (specify)

c) Between 7 - 13 hours (specify)

d) Between 14 - 20 hours (specify)

e) Other (specify)

58) For what purposes do you use the outside of your caravan?

a) Neighborhood relations (for socialization)

- b) In cold weather conditions
- c) In hot weather conditions (for cooling purposes)
- d) For the purpose of eating and resting
- e) Other (specify

59) What are your outdoor activities during the day?

- a) Socializing with users around
- b) I use it as a sitting area
- c) I use it as a bed area
- d) I use it for entertainment purposes only
- e) Other (specify

60) How is the exterior lighting of your caravan provided?

- a) I use solar powered lamps
- b) I have solar panels
- c) I use the electrical connections placed around the caravan with cable.
- d) Via battery lights or candle
- e) Other (specify

61) How do you meet your electricity needs in your environment?

a) With the generators in the vehicle

b) With solar panels

c) With Battery Assistance

d) Use of battery-powered or solar-powered electrical appliances

e) Other (specify)

62) Did you stay in your caravan during the pandemic process? From where?

63) Have you traveled abroad with your caravan? If so, where did you stay?

64) Do you find caravans safe? (In terms of natural disaster and security

65) Is your caravan suitable for large family accommodation? Is it open to flexible uses?

Appendix D: Architecture, Planning and Design Ethics Subcommittee Approval

MİMARLIK, PLANLAMA VE TASARIM ETİK ALT KURULU

12.07.2023

Sayı: ETK00-2023- 0146

Konu: Etik Kurulu'na Başvurunuz Hk.

Sayın: A. Oytun Kayan

Prof. Dr. Kağan Günçe danışmanlığında yürütmekte olduğunuz "Caravan Organization as a Mobile Space in terms of User Satisfaction" konulu YL tez çalışmanızla ilgili başvurunuz, Doğu Akdeniz Üniversitesi Mimarlık, Planlama ve Tasarım Etik Alt Kurulu'nun 12.07.2023 tarih ve 2023-12 sayılı toplantısında incelenerek uygun bulunmuştur.

Çalışmalarınızda başarılar dilerim.



Prof. Dr. Özgür Dinçyürek

Mimarlık, Planlama ve Tasarım Etik Alt Kurulu Başkanı