

Self-Identification Phenomenon in A Temporary Shelter Unit After A Disaster: AFAD Containers

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Abstract

Container homes used to meet the shelter needs of disaster victims in the post-disaster period are often foreign environments, which can create psychological challenges. The process of individuals adapting to a space begins with personalization. This study examines the physical and psychosocial needs of disaster victims through the 'phenomenon of personalization.' Implementing different forms of personalization to overcome alienation from the space can facilitate the acceptance process by making the environment familiar. The research addresses the personalization processes of disaster victims in containers and their user requirements, collecting data through observations and semi-structured interviews in the AFAD container city in İskenderun. As a result, the personalization that disaster victims engage in within the container contributes to psychological, social, and physical recovery processes. Therefore, it is essential that post-disaster shelter spaces are designed to allow for personalization and adopt a user-centered approach.

Keywords: Self-identification, phenomenon of self-identification, disaster, temporary shelter, AFAD containers.

Afet Sonrası Geçici Barınma Biriminde Kendileme Olgusu: AFAD Konteynerleri

Öz

Afet sonrası dönemde afetzedelerin barınma ihtiyacını karşılamak için kullanılan konteyner evler, genellikle yabancı mekanlardır ve bu durum psikolojik zorluklar yaratmaktadır. İnsanların bir mekâna alışması, kendileme süreciyle başlar. Bu çalışma, afetzedelerin fiziksel ve psiko-sosyal gereksinimlerini 'kendileme olgusu' üzerinden incelemektedir. Mekâna yabancılaşmayı aşmak için farklı kendileme biçimlerinin uygulanması, mekanın tanıdık hale gelmesini sağlayarak kabullenme sürecini hızlandırabilir. Araştırma, afetzedelerin konteynerde kendileme süreçlerini ve kullanıcı gereksinimlerini ele almakta; İskenderun'daki AFAD konteyner kenti üzerinde gözlem ve yarı yapılandırılmış görüşmelerle veri toplamaktadır. Sonuç olarak, afetzedelerin konteynerde yaptığı kendileme, psikolojik, sosyal ve fiziksel iyileşme süreçlerine katkı sağlamaktadır. Bu nedenle, afet sonrası barınma mekânlarının, kendilemeye olanak tanıyacak şekilde tasarlanması ve kullanıcı odaklı bir yaklaşım benimsenmesi önemlidir.

Anahtar kelimeler: Kendileme, kendileme olgusu, afet, geçici barınma, afad konteynerleri.

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1. Introduction

Disasters deeply affect people's living spaces and daily practices. Especially earthquakes force individuals away from their homes and direct them to temporary shelter areas. In this process, disaster victims must adapt to new and limited environments. Container homes, which are frequently used to meet the urgent shelter needs of disaster victims in the post-disaster period, are often unfamiliar and unusual for them. Regardless of the reasons, being away from their homes and surroundings and adapting to a new place is psychologically challenging for them. The behaviors and actions exhibited by disaster victims in temporary shelter units reflect their relationship with that space. Disaster victims reshape container-type temporary shelters through their bodily experiences, sensory perceptions, and cognitive interpretations, transforming these limited spaces into livable and familiar areas. This process is explained by the concept of "self-identification." "Self-identification" is a process in which disaster victims play an active role as subjects, and spatial transformation occurs over time. The process of adapting to a space begins when individuals feel a sense of belonging to that space. The most effective way to feel a sense of belonging is through the process of self-identification. Disaster victims adapt container-type temporary shelters to their living spaces through their daily practices, routines, and personal belongings. In this way, unfamiliar and limited spaces become familiar and livable areas. Actions such as creating a kitchen corner, displaying personal belongings, and hanging photographs make the space feel like their own. Additionally, social practices such as developing neighborhood relationships and using common areas make temporary shelter spaces more livable. This study discusses how disaster victims make sense of and transform spaces through their physical and psycho-social needs, daily movements, actions, and perceptions, focusing on the phenomenon of self-identification. Evaluating the self-identification process in terms of its potential to create more familiar and adopted, livable areas to overcome alienation from the space and the psychological difficulty of adaptation forms the main argument of this study. In this context, applying different forms of self-identification to address physical and psycho-social user requirements in the space has been hypothesized to facilitate the transformation of the space into a more familiar environment, speeding up the process of acceptance and creating more long-term livable areas. There has not been sufficient attention in the literature to the investigation of the reasons behind the interventions made by disaster victims in their self-identification processes. Therefore, this research is important as a descriptive study to highlight the significance of self-identification in space, identify the forms and methods of self-identification, and determine how user requirements affect self-identification and housing formation. The aim of the research is to evaluate the relationship between self-identification forms and interventions and user requirements beyond merely examining the adaptation to space in the self-identification process of disaster victims. The topic is limited to studies addressing the phenomenon of self-identification in space, its forms, interventions, and user requirements in container-type temporary shelter units following disasters. The structure of the study consists of three phases. In the first phase, publications related to the topic were reviewed to establish a conceptual framework. In the second phase, field research was conducted to provide data for the study. In the final phase, information about the selected area was presented, and identity cards were created to make the examination clearer and more readable. Additionally, this phase explains how to read the identity cards. At this point, the theoretical framework established through the literature review will be explained.

1.1. Conceptual Framework

In the thesis database of the Higher Education Council (YÖK), The DergiPark Academic Database, The Architecture Web Database, Google Academic Turkey, Google Scholar, Scopus, and ScienceDirect Databases, the keywords "self-identification of space, user requirements, forms of self-identification, post-disaster shelter, container and self-identification, temporary shelter and self-identification, user interventions" were searched. As a result of the research, publications within the scope of the topic were examined to establish a conceptual framework.

1.1.1. The phenomenon of self-identification

People develop various forms of interaction with time and space. One of these forms of interaction is a phenomenon expressed in Turkish as "kendileme," which corresponds to the concept of "appropriation" in English (Bilgin, 1990). The self-identification process refers to people's behaviors of claiming and personalizing spaces. In this process, no one positions a space merely as a signifier. On the contrary, people organize, arrange, and differentiate the spaces they feel belong to them compared to other spaces or the environment. This phenomenon is generally referred to by the concept of self-identification (appropriation) (Bilgin, 1990). Self-identification can be seen as an indicator of authority or control that emerges from the transformation of a place or space (Bilgin, 1997). An individual organizes and differentiates a space that they consider their own dialectically in relation to others' spaces and/or the environment. At this point, the phenomenon of self-identification refers to "the act or process of a person perceiving something as belonging to themselves or making it their own" (Graumann, 1976). In other words, self-identification can be viewed as the entirety of efforts to make something foreign, uncontrollable, and unowned familiar, known, and meaningful (Karasu, 2021). The definition of the self-identification concept has varied before and after the 20th century: In earlier periods, self-identification behavior was defined as "truly owning" a place through actions such as defending and protecting it (Altman and Zube, 1989; Aubert-Gamet, 1997; Kärrholm, 2007; Mehta, 2013). However, starting from the 20th century, researchers began to redefine self-identification as "symbolic ownership" through the short or long-term alteration and transformation of space by people (Mehta, 2013). The concept of self-identification (from the Latin *appropriare*, "to make one's own") is a concept developed in Marxist thought (Marx, 1893/1994). Karl Marx (1818-1883) borrowed this concept from G. W. Friedrich Hegel (1770-1831) (Esteban-Guitart, 2014). In this context, self-identification has been developed as a Hegelian and Marxist concept to understand the dialectical nature of human-environment interaction, that is, how people change by altering their environments (Graumann, 2002). The concept of self-identification is a rich concept used in various fields by prominent thinkers and researchers from philosophy (e.g., Karl Marx) to literature (e.g., Mikhail Mikhailovich Bakhtin), from psychology (e.g., Carl Graumann, Lev Vygotsky) to environmental psychology (e.g., Perla Korosec-Serfaty, Enric Pol). According to Graumann (1976), self-identification can be defined as "the act or process of a person perceiving something as belonging to themselves or making it their own." The process of self-identifying with space can be argued to arise from the need to experience one's existence and the uniqueness of one's self by emphasizing the difference between "self" and "other" (Göregenli, 2021). Here, a person's existence in this world is considered to be embedded in their place in space, in other words, their spatiality (Korosec-Serfaty, 1985). According to Marx, people reproduce themselves by affecting and even transforming their environments and the world through the objects they produce or design, thus renewing and developing their potentials. When people cannot claim the products they produce or design as their own, experiences of alienation may arise (Marx, 2013). Self-identification is one of the ways individuals can overcome the experience of alienation (Graumann, 1976) and exist as themselves. The behavior of self-identification has a significant impact on the transformation and change of communication among individuals (Henk de Haan, 2005). Feldman and Stall (2004) also emphasized that self-identification behavior is an interactive process that changes both the physical environment and group-individual relationships. In this respect, self-identification can be considered an individual, social, and spatial need (Lara-Hernandez, 2020). The relationship between self-identification and space was established in the 1970s. The concept of self-identification has been examined in many theoretical and empirical studies (Brunson et al., 2001; Korosec-Serfaty, 1976) regarding an object or space. The concept of self-identifying with space has been explained in various ways. For example, the Space Self-Identification Scale developed by Morval & Judge (2000) and validated for its French version by Rioux (2004) consists of three sub-dimensions: Knowledge of the environment (French: *connaissance de l'environnement*), free circulation (French: *libre circulation*), and stimulation of the environment (French: *stimulation de l'environnement*). Similarly, Brunson and colleagues (2001) approached self-identification in space as physical (being physically present in the space), social (conversing with people in the space, etc.), and regional self-identification (behaviors indicating ownership, control, etc., in the space). In summary, the concept of self-identifying with space can be conceptualized in different ways according to the

aims and scope of the research (Karasu, 2021). Some studies address self-identification with space in terms of cognitive, behavioral, and social dimensions, while others examine it through more specific indicators. This diversity reflects the multifaceted nature of the phenomenon of self-identification with space. Lefebvre (1995) described the self-identification of space as a transformed natural space where needs are met and regarded it as the most essential condition for reaching a sense of belonging. At this point, self-identification with space can be defined, in its simplest terms, as the psychological process of making a space (space) one's own and transforming it into a place (place) (Graumann 1976; Rioux et al., 2017). Through self-identification behavior, people create "places" (place) that belong to them by making changes within the "space" (space) according to their needs, whether short-term or long-term (Mehta, 2013). The most significant difference between space and place lies in the relationship people establish with that space (Cresswell, 2004; Özkan, 2017). At this stage, a unique bond is formed between the individual and the space. This bond is reciprocal: on one hand, the individual undergoes change and transformation while producing new experiences and meanings related to that space; on the other hand, through ownership, different aspects of that space (for example, the emergence of new areas through new activities in the space) can arise, leading to changes and transformations in the space itself (Modh, 1998). Self-identification behavior is a structure that emerges as a result of this relationship with the environment and has a significant impact on the transformation of space into "place." Kärrholm (2005) also noted that, along with self-identification behavior, the same spaces can transform into "places" that allow for different uses at different times or even simultaneously. The self-identification of space is one of the ways a space can be transformed into a personal place (Benages-Albert et al., 2015; Rioux et al., 2017). This process requires acceptance and willingness towards the space to be owned (Göregenli, 2021). With the transformation of space into "place," that space ceases to be a limited void and becomes meaningful, lively places where needs are met (Tuan, 1977; Kyle, 2009; Cilliers et al., 2015). In other words, the relationship people establish with that space and their self-identification behaviors transform spaces into meaning-laden "places."

As a result, self-identification behavior is a process that emerges from the relationships people have with their environment and plays a crucial role in the transformation of spaces into "places." Pol (2002) indicated that self-identifying with space enhances the sense of responsibility over it, thereby strengthening belonging and attachment to place. At this point, it can be said that self-identification behavior serves two important purposes. The first is that it contributes to the transformation of space into "place," facilitating high levels of usage and diversity of activities in that space (Fischer, 1981; Bonnes & Secchiaroli, 1995; Aubert-Gamet, 1997; Bonnin, 2006; Mehta 2013). The second is that it allows for the establishment of strong social interactions by increasing the diversity of relationships among people (Moser et al., 2002; Feldman and Stall 2004; Henk de Haan, 2005; Noorian, 2009; Mehta 2013). The process of self-identifying with space corresponds to the entirety of processes where individuals claim ownership of space, actively use it, produce meaning within it, and attach themselves to it (Rioux et al., 2017). In this context, self-identifying with space can have implications for daily life. For example, it can be expected that a person who self-identifies with a particular space may give it more importance and consequently exhibit more positive behaviors towards its preservation or development (Benages-Albert et al., 2015; Moser et al., 2002).

Wineman & Peponis (2010), in their study on how architecture is experienced and understood by users, addressed the concept of "self-identification" in the context of spatial experience; Seamon (1980) defines the process of "self-identifying with space" as the way people make sense of their environments through their subjective experiences, movements, and actions. Dovey (1985) describes the concept of "self-identification" in the context of "spatial practices," where people shape spaces with their daily experiences, habits, and actions, endowing them with their own subjective meanings. According to these approaches, users "self-identify" their spaces in unique ways through their perceptual, cognitive, bodily, and daily experiences. This process plays a significant role in the formation of the identity of space. Self-identifying with space can manifest in two types of relational forms: rootedness and wandering (Vidal et al., 2010). Rootedness indicates a deep and intrinsic connection between a person and a space, identifying that space with oneself and its history (Tuan, 1977); wandering refers to a more transient and fragmented relationship with spaces, indicating an

experience focused on "here and now." Additionally, ownership is not a necessary condition for the self-identification process to occur (Graumann, 1976; Bilgin, 1991; Göregenli, 2021; Bilgin, 2011). Complete ownership rights over cities, streets, or common spaces cannot be claimed. However, people can add personal touches to such spaces, incorporating elements of themselves and feeling a sense of belonging to those spaces. Even in the absence of formal ownership, individuals can feel attached to those spaces, use them according to their needs, transform them, and personalize them. In the self-identification process, full ownership is not required. What is essential is that individuals develop a sense of ownership and belonging towards those spaces.

1.1.2. Forms of self-identification

The process of people becoming accustomed to a space begins with feeling a sense of belonging to that space. The most effective way to feel a sense of belonging to a space is through the process of self-identification. If spaces lack the characteristics suitable for self-identification, disaster survivors struggling to adapt to the space gradually become alienated and cannot feel that they belong there. Şahiner Tufan (2019) explains that self-identification occurs in two different ways (Table 1). The first is spatial self-identification, which can be organized in various ways, and the second is elemental self-identification, which involves the elements of the space.

Table 1. Classification of Self-Identification Forms (Şahiner Tufan, 2019)

Forms of Self-Identification	Spatial Self-Identification	Organization of the space
		Space Surface
		Furniture
	Surface Self-Identification	Electrical Equipment
		Accessory (Daily/Functional)
		Accessory (Visual/Ornament)

Space organization refers to the situation where an event takes place in a location organized according to the individual's purpose (Gür, 1996). The surface of the space, which determines its identity and is the first point of contact for the user, is crucial. According to Brooker and Stone (2011), a well-executed surface or a well-chosen material adds meaning to the space and establishes a relationship with the user. The surfaces of a space consist of three sections: walls, floors, and ceilings. Özdemir (1994) uses the term "element" for the furnishings and items within the space, noting that they can carry symbolic or meaningful values. In this context, furniture, electrical appliances, visual/decorative items, and daily/functional accessories belonging to the user are defined as "elemental self-identification." The most significant factor and component in the formation of space identity is the behavior of self-identification. Self-identification is the clearest and simplest expression of the dialogue between the individual and the space. People change their spaces to distinguish themselves from others (Twigger & Uzzell, 1996). This behavior stems from the need to control one's living area, the desire to reflect aesthetic preferences, and the wish to align activity patterns with the space (Wells, 2000). With self-identification, which also brings a sense of responsibility, the individual adopts, protects, cares for, and loves the space. According to Bilgin (1997), interventions that are primarily involved in self-identification include organizing the space by placing items, controlling the opening and closing of the space, and removing certain elements of the space.

1.1.3. Self-identification and user interventions in the post-disaster sheltering process

Every year, millions of people around the world face various natural disasters due to the geographical locations of the cities they live in, resulting in loss of life and property. This situation constitutes a significant risk factor in terms of the frequency and impact of disasters (Ertaş Beşir and Dereci, 2021). Unexpected disasters that occur suddenly and leave people homeless bring about a significant issue: the problem of sheltering. In this extraordinary situation, temporary housing solutions are provided. One of these solutions, containers, becomes the new homes for disaster survivors. Adapting to this process and embracing their new homes requires time. During this process, individuals communicate with the space. In the post-disaster period, temporary housing solutions frequently used to meet the urgent shelter needs of disaster survivors are often unfamiliar and unusual spaces for them. However,

disaster survivors tend to reshape these spaces according to their needs, habits, and experiences. This process is referred to as "self-identification."

To understand why disaster survivors feel the need to self-identify with temporary housing areas, it is essential to consider their experiences and psychological states after the disaster. Disasters are traumatic experiences for survivors and deeply affect their daily routines, habits, and social relationships. After a disaster, survivors feel cut off from their familiar environments, homes, and daily living spaces. This situation creates feelings of insecurity, alienation, and loss of control. At this point, disaster survivors feel the need to reshape temporary housing areas according to their needs, habits, and experiences, creating familiar and livable spaces. Through the self-identification process, temporary housing areas not only serve the physical function of shelter but also transform into livable, familiar spaces. Through their bodies, senses, and minds, disaster survivors organize their living spaces based on the relationships they establish with their environments. According to Turgut (2014), disaster survivors reshape temporary housing units like containers and tents according to their needs, habits, and experiences. In this process, the bodies, senses, and minds of disaster survivors transform temporary housing areas into livable spaces. This process reduces feelings of insecurity, alienation, and loss of control experienced by survivors in the post-disaster period, providing them with a sense of belonging and security. Ayataç & Güney (2016) state that disaster survivors transform their temporary shelters by understanding them through their sensory, bodily, and cognitive experiences. Thus, through the self-identification process, disaster survivors create their living spaces. Çavdar and Çabuk (2016) emphasize that disaster survivors make sense of and transform tent spaces through their daily actions, habits, and experiences. Movements within the confined space of the container increase survivors' awareness, contributing to the expansion and transformation of spatial boundaries (Doan & Yamazaki, 2020). Disaster survivors interpret and transform container spaces through their sensory, bodily, and cognitive experiences. For example, a family may rearrange the interior layout of the container according to their daily life rituals. They can adapt the kitchen area to their cooking habits and reorganize the sitting area to accommodate family members (Turgut, 2014). Similarly, disaster survivors can personalize the space by hanging family photos or their children's drawings on the walls of the container (Çavdar & Çabuk, 2016). In this way, the container transforms from an extraordinary and foreign space into a familiar and livable area through the sensory, bodily, and cognitive experiences of disaster survivors. Additionally, disaster survivors also self-identify with these spaces by carrying out their daily routines, habits, and social interactions within the container. For instance, small gardens set up in front of the containers meet the survivors' need to connect with the outdoors while also reflecting their relationship with the environment. Similarly, common areas created within the container spaces support social interactions and solidarity among disaster survivors (Çavdar & Çabuk, 2016). While self-identifying within the container, users can utilize intervention methods similar to those used in standard housing, depending on social change (Perker & Akıncıtürk, 2011). The first of these methods is the addition method. This is an important type of intervention at the level of building materials, components, or systems. It can be spatially and volumetrically significant. In traditional housing, the areas where the most additions are made include wet areas, rooms, entrances, etc. These areas can be added outside the structure or individually within the space (Perker & Akıncıtürk, 2011). In this study, all interventions made at the scale of the space (including or creating new areas) and at the scale of space elements (furniture, accessories, electrical appliances, etc.) are considered "addition." The second method is cancellation/modification. This involves changes or cancellations made to space elements, components (doors, windows, etc.), or areas according to user needs. In some examples, the removal of walls and the expansion of spaces can be cited (Perker & Akıncıtürk, 2011). Thirdly, the transformation method can be considered as adapting according to usage situations. Fourthly, expansion can be viewed from two aspects: interventions made due to insufficient space for requirements (expanding rooms, enlarging the facade, etc.) and transformations in the size of existing elements. The final method is the division intervention, which involves dividing the existing area horizontally or vertically according to needs. The additions, cancellations/modifications, transformations, expansions, and divisions made in this study are referred to as "user interventions."

In this study, to understand the forms of self-identification carried out through the interventions of people living in containers, it is essential to explain what the self-identification needs of users might be.

1.1.4. User requirements and their classification

Need can be defined as the requirement for something. User needs are the environmental conditions that help users maintain their lives comfortably within a space from social, psychological, and physiological perspectives and assist them in being efficient in their tasks (Atasoy, 1973; Günal, 2006). Built environments must adapt to the constantly changing needs of their users. If built environments remain limited in the face of people's dynamic and changing requirements, it can reduce the user's comfort level, disrupt the use of the structure, and lead to abandonment. The relationship between humans and the built environment can be understood through the behaviors and actions exhibited by people in that environment (Alsibai & Özcan, 2022). In this context, at the core of needs are people and their changing desires. The concepts of need and desire are often confused (Günal, 2006). However, while need refers to the conditions necessary for individuals to effectively carry out their actions within society, desire is a more subjective and variable concept (Atasoy, 1973). The characteristics expected from a space by individuals are a result of user needs. These needs represent the minimum qualities and conditions that the physical environment must possess for space users to perform their actions. Maslow (1943) addressed the basic needs of people in a social context in a hierarchical order. These needs include physiological, safety, belonging, esteem-prestige, self-actualization, intellectual, sensory, and aesthetic satisfaction needs (Günal, 2006). User needs are defined as all environmental and social conditions that enable people to live without discomfort from physiological, social, and psychological perspectives and to be efficient in their work. Researchers have classified user needs in various ways. According to Bayazit (1982), there are technical, environmental, and human needs; while Buğday (1991), Gül (1993), and Dönmez and colleagues (2015) categorize them as physical and psycho-social needs (Korur et al., 2006). Physical user needs involve providing the necessary physical conditions for users to carry out their actions comfortably and efficiently (Armağan, 1997). These needs can be addressed under the following categories: spatial, health, physical environment conditions, and safety needs (Buğday, 1991; Gül, 1993; Korur, 2006; Dönmez et al., 2015). Spatial Needs: These are the provisions of adequate space, equipment, and furnishings in the environments where users operate. Spatial user needs are the characteristics that the space must possess for users to perform their actions comfortably, effectively, and efficiently. These needs include dimensions and proportions, color, and lighting elements (Buğday, 1991). Dimensions and Proportions: These refer to the sizes of spaces that meet the user's dimensional needs and provide psychological comfort (Ateş, 1988). Color and Lighting: The lighting level and color characteristics of the space are determined by factors such as the number of users, age, and cultural differences. When the user's dimensional needs are met, they can experience comfort in terms of space dimensions. Lighting and color characteristics also play a significant role in the perception of the space. In conclusion, spatial user needs encompass the physical and visual characteristics that the space must possess for users to carry out their actions comfortably and efficiently. Health Needs: These include meeting users' health and hygiene requirements and providing appropriate temperature, light, and ventilation conditions. The environment must have qualities that do not harm user health, such as the provision of clean water, drainage of wastewater, and disposal of waste and other refuse (Korur, 2006). Physical Environment Conditions: These refer to the absence of negative effects from physical environmental factors such as climate, noise, and pollution on users. They encompass the necessary temperature, humidity, visual, and auditory conditions for users to maintain a comfortable life within the space (Korur, 2006). Particularly in buildings located in cold climate regions, inadequate thermal insulation may lead to unsuitable temperature and humidity levels for user comfort. This situation can cause visual and health issues, such as mold on wall surfaces. Safety Needs: These involve ensuring the safety of users regarding life and property and taking precautions against potential dangers. This includes the structural integrity of the space and protective features against risks such as fire, natural disasters, theft, and accidents. Ensuring the safety of users' lives and properties is possible through the fulfillment of these needs. Psycho-Social User Needs: These needs encompass the environmental

conditions necessary for users to have a comfortable and satisfying experience from psychological and social perspectives (Güremen, 2016). These needs can be classified into privacy, behavioral, aesthetic, and social needs (Buğday, 1991; Gül, 1993). Privacy Needs: This refers to the need for users to protect their private areas visually and auditorily (Buğday, 1991). Visual privacy includes the non-visibility of action areas from other spaces, while auditory privacy involves preventing sound transmission (Korur et al., 2006; Uzunoğlu & Özer, 2014). Behavioral Needs: These are the spatial characteristics that align with users' personal preferences and lifestyles. For example, some users may prefer spacious and open environments, while others may prefer smaller and more private spaces (Korur et al., 2006; Uzunoğlu and Özer, 2014). Aesthetic Needs: These are the spatial characteristics that visually satisfy users psychologically. Elements that appeal to visual effects, such as dimensional ratios, colors, and textures, meet aesthetic needs. The concept of aesthetics can vary from person to person and can also be shaped according to the purpose the space will serve (Korur et al., 2006). Social Needs: These are the spatial characteristics that reflect users' family structure, lifestyle preferences, and social relationships (Korur et al., 2006).

2. Material and Method

First, a field study was conducted to provide data for the research. The research population was selected as Turkey's Hatay province, which has historically been exposed to many earthquakes and experienced the most devastating effects of the earthquake on February 6, 2023. In this earthquake, known as the "disaster of the century," there were significant losses of life and property in Hatay. Many people lost their homes and were relocated to tent cities or container cities. The accessibility of the Hatay region for researchers for observation and interviews facilitated the selection of this area (Duruel, 2023). The container cities surrounding the central campus of Iskenderun Technical University in Iskenderun district of Hatay form the boundary of this study. The sample is limited to the AFAD container city. The reason for selecting this area is that disaster survivors have been living in the containers, which were put into use after the earthquake, for nearly 1.5 years. Despite having the same spatial and structural characteristics as other container cities, there are spatial differences created by the interventions of disaster survivors on the building envelope and the use of the space. The AFAD container city consists of 270 containers. Figure 1 shows the location of the container city, the settlement plan, and the external interventions and changes made by the disaster survivors to their containers.

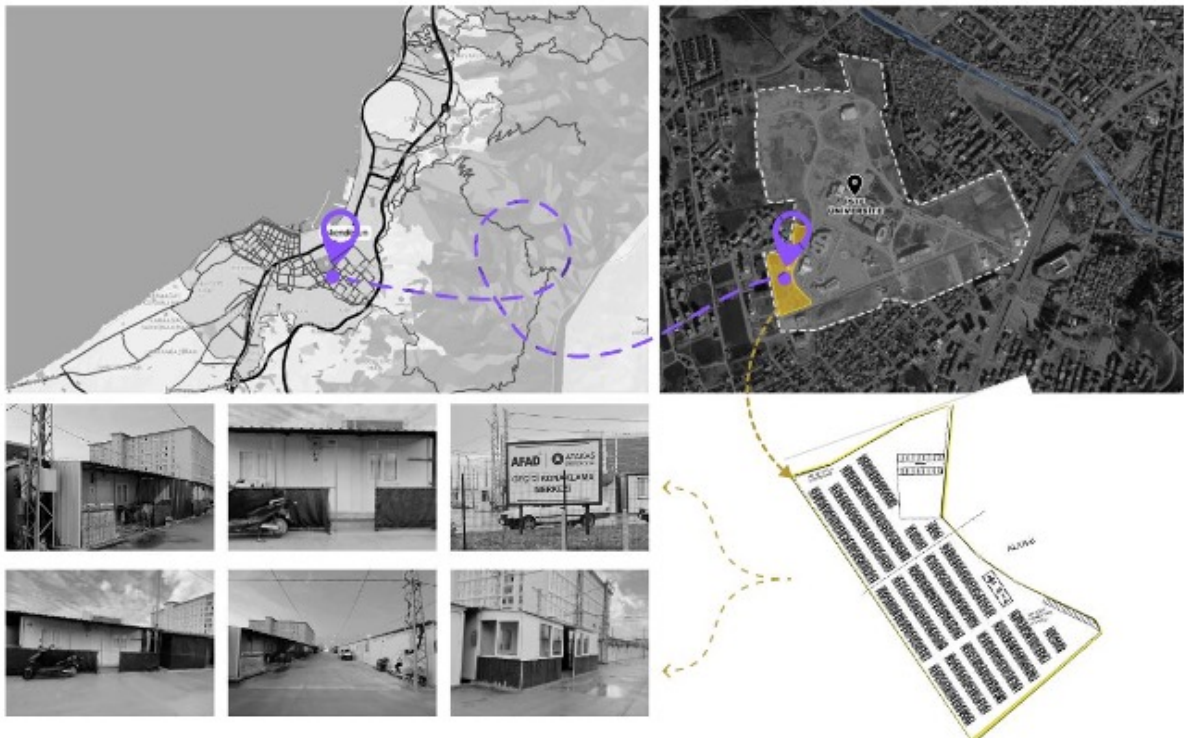


Figure 1. Iskenderun AFAD Container City (Tarakçı, 2024)

In this study, the descriptive model from quantitative research methods was preferred as the research method to establish a generalizable judgment by revealing the existing situation of the problem. The main problem identified is the necessity for individuals to feel a sense of belonging to the space they are forced to live in. This problem is addressed through defining the user group, understanding their relationship with the space, identifying user needs, and analyzing how they personalize the space via semi-structured interviews conducted with the selected group. In this context, the AFAD container city in Iskenderun was examined, and data were obtained using observation, information collection, and semi-structured interview techniques. The observation method provided additional information about users, housing, and the surrounding environment that could not be obtained through the survey form, thus allowing for a more accurate assessment of the survey data. Observations were carried out through photographs, videos, audio recordings, drawings, and written notes. The use of the interview form and the observation method was considered to be closely related, and an evaluation was made accordingly. The combined use of surveys and observation methods provided a more comprehensive opportunity for data collection and analysis.

The criteria for inclusion in the study group included being directly affected by the earthquake and living in the container city, having made any changes to their containers, being able to express themselves verbally, being over 18 years old, and allowing photography of both indoor and outdoor spaces for the study. In this context, 52 out of 110 containers that were interviewed met the inclusion criteria. However, 5 containers were selected for detailed analysis where internal and external assessments could be conducted most effectively. Based on the analyses conducted, an effort was made to determine how the relationship between disaster survivors and containers was established through personalization.

At this point, the study was shaped by the theoretical framework obtained from the literature review and the interviews conducted in the selected area. With the information obtained from the literature and the interviews conducted in the selected area, sub-parameters related to personalization methods, user interventions, and user needs were created. The sub-parameters formed through the semi-structured interviews were supported. The two main principles of personalization methods were examined in accordance with spatial and elemental personalization and their sub-parameters. The two fundamental principles of user needs were studied according to physical and psycho-social needs and their sub-parameters. User interventions were also addressed with the parameters of addition, cancellation/modification, transformation, expansion, and division. Identity cards were created for the containers to be analyzed with these parameters.

Identity cards have been created to provide information about the selected area and to make the examination clearer and more readable. Instructions on how to read the tables related to the identity cards are explained in Figure 2.

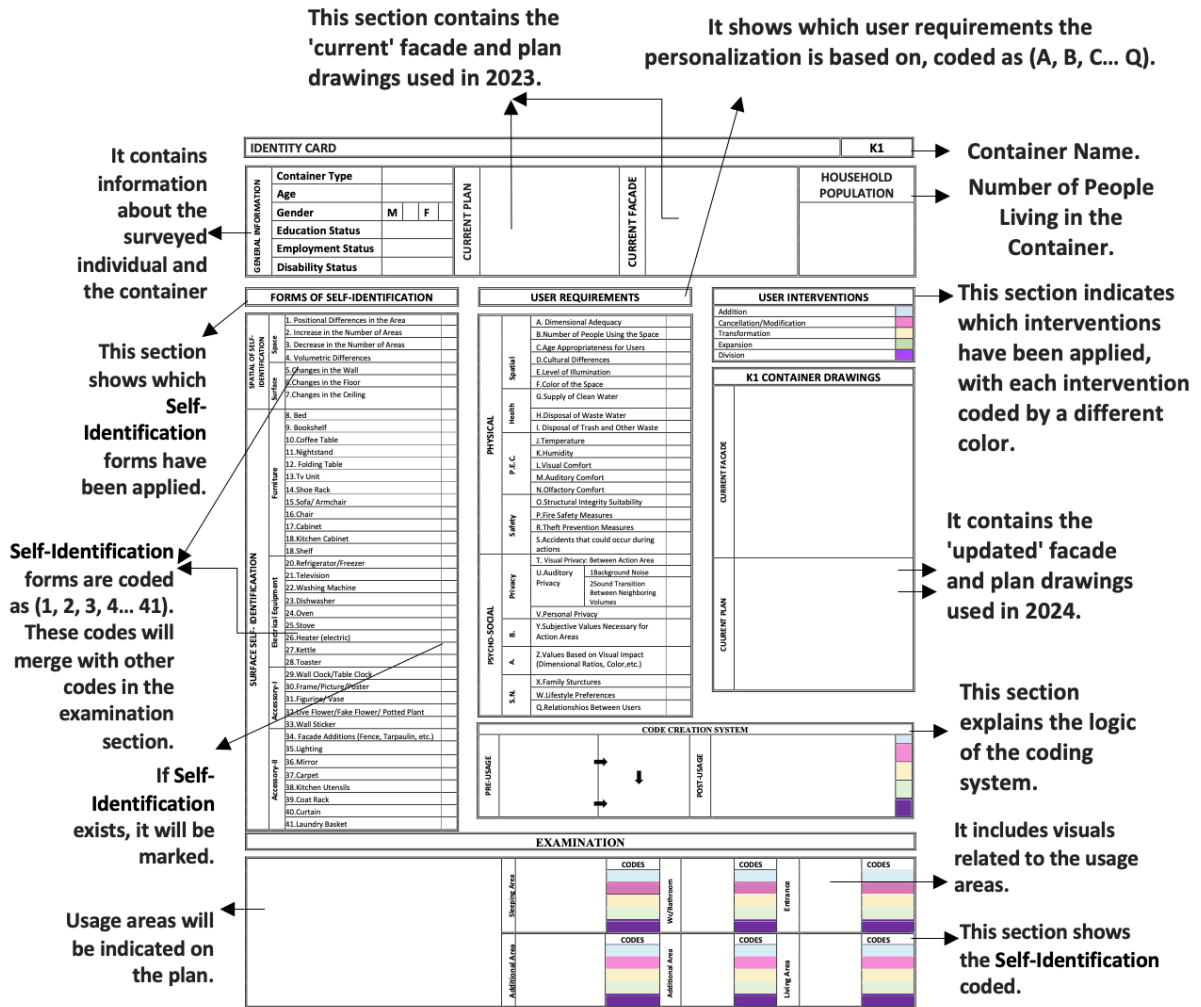



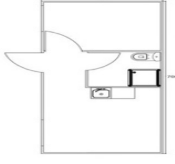


Figure 2. Explanation of the identity card (created by the author)

The container to be analyzed will be shown with the identity card depicted in Figure 2. The identity card consists of 8 sections within its own system. These sections include: the section where the container name is given, the section explaining general information, the section coding the forms of personalization, user needs, and user interventions with their sub-parameters, the section providing post-use drawings of the container, the section explaining the coding system, and the section where the examination is conducted visually and through coding.

Section where the container name is given: The names of the containers have been changed for confidentiality reasons and are labeled in the top right corner as “K1, K2, K3, K4, and K5,” using the first letter of the word “Container.” The actual container names are not disclosed.

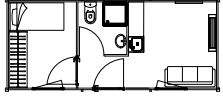
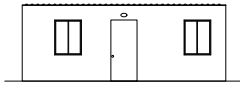

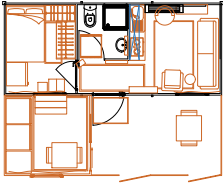


Section explaining general information: This section is divided into three parts. The first part includes data on the age, gender, education level, employment status, and disability status of the disaster survivor surveyed, along with information about the type of container (Table 2). Following various disasters like earthquakes, public institutions in Turkey have provided emergency and temporary housing units, one of which is containers. Different types of containers were observed in the selected study area.

Table 2. Shows the types of containers considered in this study (Tarakçı, 2023)

CONTAINER TYPES (TYPE-1)			
İskenderun Container City		7m x 3m	
			
Image	Plan	Front View	Side View

The information about the types of containers in the study area is included in the general information section. These containers, which started being used in 2023, were supplied by AFAD. The second part includes the “existing plan” and “existing facade” drawings to understand the current condition of the containers at the time they were put into use (2023). As seen in Table 3, the provided containers contain a sofa, TV, air conditioning, mini refrigerator, two-burner stove, bunk bed, and wardrobe.

Table 3. Shows the types of containers considered in this study (Tarakçı, 2023)

CONTAINER TYPES-1			
PRE-USAGE	Pre-Usage Plan	Pre-Usage Facade	Pre-Usage Container
			
POST-USAGE	Current Plan	Current Facade	Current Container
			

The drawings of the same containers still in use in 2024 are referred to as “current plan” and “current facade.” To better visualize the interventions made by disaster survivors in the containers over 1.5 years, they are drawn in orange in the current plan and facade drawings. The third part (top right corner) contains household information, indicating the number of people living in the container.

Section where personalization forms are applied: When examining the phenomenon of personalization in the containers, coding will be done using numbers, letters, and colors. The purpose of this coding is to make the understanding of personalization in the space clearer. Personalization forms are represented by numbers. The two principles of personalization examined are spatial and visual, addressed with their sub-parameters. Each parameter is coded from 1 to 41, allowing for an understanding of the type of personalization being analyzed through the code. For example, the code “6O” corresponds to the parameter “spatial personalization-surface-floor change.” The letter “O” relates to user needs.

Section where user needs are identified: This section explains the user needs that led to the forms of personalization. They are considered under two principles: physical and psycho-social, with these two principles further divided into sub-parameters. These parameters are coded with letters A, B, C, D...Q, allowing for an understanding of which need prompted the form of personalization. The reasons for personalization were identified through data from interviews with users, photographs, observations, and drawings. For example, the code “6O” indicates that the “6” refers to the parameter “spatial personalization-surface-floor change,” while “O” corresponds to the parameter “physical needs-security-structural soundness.”

Section where user interventions are identified: After determining the user needs that prompted the forms of personalization, this section identifies the interventions made using color coding. Light blue (Addition), pink (Cancellation/Modification), light yellow (Transformation), light green (Expansion), and purple (Division) are randomly selected colors. During analysis, the determined codes will be written in the section corresponding to the intervention made. For example, if the code “60” indicates a floor change, and if this change was made by canceling or modifying the existing floor, it will be written in the pink section; if it was made by adding to the floor, it will be written in the light blue section. Different codes may appear in the same color, and the same codes may also appear in different colors.

Section where container drawings are found: This section will provide the plan and facade drawings of the current state of the container used by the users who have lived in it since 2023, based on interviews conducted on June 5-6-7, 2024. Visuals will also support this section as per space availability.

Section explaining the coding system: This section will explain the coding process of the analyzed container using visuals before and after use. This is intended to clarify the logic behind the coding.

Section where the examination is conducted: In this area, the current plan will be provided, and the spatial areas will be shown on the plan. Visuals of the areas provided as plans will also be included, followed by separate codings related to the personalization process for each area. Each coding will be written in the row corresponding to the intervention made with that color.

3. Findings and Discussion

In this section, the phenomenon of personalization observed in five containers has been examined through interviews, observations, and photographs, using the created identity cards.

K1 Container: Through the conducted interviews, the interventions made by the disaster survivor in the container have been observed. The reasons for these changes were specified by the survivor during the discussions. Figure 3 shows the changes made to the facade and the interior of K1 container, as well as another container located right next to it.

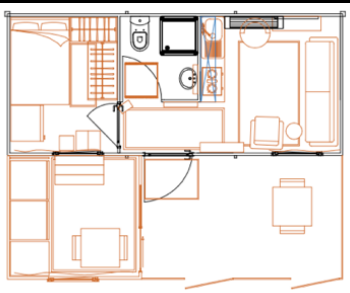

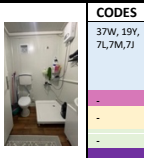
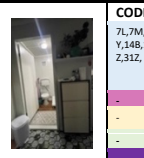
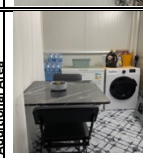
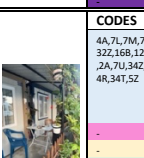
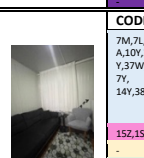


Figure 3. Examples of personalization in the facade and interior of the container (Tarakçı, 2024)

Despite living with two people, due to space constraints, they extended the front facade of the container to match its original dimensions, thereby creating two additional areas. They explained in the discussions that they changed the flooring, acquired new furniture/items/accessories, and

returned the provided furniture without using it. All examples of personalization in the container are shown in Table 4 through the identity card.

Table 4. Examination of the the Phenomenon Of Self-Identification in the "K1" Container (Tarakçı, 2024)

IDENTITY CARD			K1									
GENERAL INFORMATION	Container Type	TYPE1	PRE-USAGE PLAN	PRE-USAGE FACADE	HOUSEHOLD POPULATION							
	Age	42										
	Gender	M <input checked="" type="checkbox"/> F <input type="checkbox"/>										
	Education Status	License										
	Employment Status	Security										
	Disability Status	-										
FORMS OF SELF-IDENTIFICATION			USER REQUIREMENTS									
SURFACE SELF- IDENTIFICATION	SPATIAL OF SELF- IDENTIFICATION	Space	1. Positional Differences in the Area	✓	PHYSICAL	Spatial	A. Dimensional Adequacy	✓				
		Surface	2. Increase in the Number of Areas	✓			B.Number of People Using the Space	✓	Health	H.Disposal of Waste Water		
		Furniture	3. Decrease in the Number of Areas	✓			C.Age Appropriateness for Users			P.E.C	J.Temperature	✓
			4. Volumetric Differences	✓			D.Cultural Differences				K.Humidity	
			5.Changes in the Wall	✓			E.Level of Illumination				L.Visual Comfort	✓
			6.Changes in the Floor	✓			F.Color of the Space				M.Auditory Comfort	✓
			7.Changes in the Ceiling	✓		G.Supply of Clean Water	✓	N.Olfactory Comfort				
	8. Bed		✓	H.Disposal of Trash and Other Waste			O.Structural Integrity Suitability	✓				
	9. Bookshelf		✓	I. Disposal of Waste Water			P.Fire Safety Measures	✓				
	10. Coffee Table		✓	J.Temperature		✓	R.Theft Prevention Measures	✓				
	11.Nightstand		✓	K.Humidity			S.Accidents that could occur during actions	✓				
	12. Folding Table		✓	L.Visual Comfort		✓	T. Visual Privacy: Between Action Area	✓				
	13.Tv Unit		✓	M.Auditory Comfort		✓	U.Auditory Privacy	1Background Noise	✓			
	14.Shoe Rack		✓	N.Olfactory Comfort			2Sound Transition Between Neighboring Volumes	✓				
	15.Sofa/ Armchair		✓	O.Structural Integrity Suitability		✓	V.Personal Privacy	✓				
	16. Chair		✓	P.Fire Safety Measures		✓	PSYCHO-SOCIAL	B.	Y.Subjective Values Necessary for Action Areas	✓		
	17.Cabinet	✓	R.Theft Prevention Measures	✓		A.			Z.Values Based on Visual Impact (Dimensional Ratios, Color,etc.)	✓		
	18.Kitchen Cabinet	✓	S.Accidents that could occur during actions	✓					S.N.	X.Family Structures		
	18.Shelf	✓	T. Visual Privacy: Between Action Area	✓		W.Lifestyle Preferences	✓	Q.Relationships Between Users				
	20.Refrigerator/Freezer	✓	U.Auditory Privacy	1Background Noise		✓	CODE CREATION SYSTEM					
	21.Television	✓	2Sound Transition Between Neighboring Volumes	✓		PRE-USAGE			POST-USAGE			
	22.Washing Machine	✓	V.Personal Privacy	✓	The container, which has been used for more than 1.5 years, shows the interventions made by the user. For the facade, areas highlighted with hair have been created. This situation shows that there is a volumetric difference (4) from the self-assembly forms. New space was needed due to its small square meters. Therefore, the reason for self-contouring is that the dimensional adequacy (A) of the user requirements is not suitable. While emphasizing the facade, the space was expanded by adding user interventions to the existing container. Coding is shown on the right							
	23.Dishwasher	✓	PSYCHO-SOCIAL	A.	PRE-USAGE			POST-USAGE				
	24.Oven	✓			The container, which has been used for more than 1.5 years, shows the interventions made by the user. For the facade, areas highlighted with hair have been created. This situation shows that there is a volumetric difference (4) from the self-assembly forms. New space was needed due to its small square meters. Therefore, the reason for self-contouring is that the dimensional adequacy (A) of the user requirements is not suitable. While emphasizing the facade, the space was expanded by adding user interventions to the existing container. Coding is shown on the right							
	25.Stove	✓	PSYCHO-SOCIAL	B.	PRE-USAGE			POST-USAGE				
	26.Heater (electric)	✓			The container, which has been used for more than 1.5 years, shows the interventions made by the user. For the facade, areas highlighted with hair have been created. This situation shows that there is a volumetric difference (4) from the self-assembly forms. New space was needed due to its small square meters. Therefore, the reason for self-contouring is that the dimensional adequacy (A) of the user requirements is not suitable. While emphasizing the facade, the space was expanded by adding user interventions to the existing container. Coding is shown on the right							
	27.Kettle	✓	PSYCHO-SOCIAL	A.	PRE-USAGE			POST-USAGE				
	28.Toaster	✓			The container, which has been used for more than 1.5 years, shows the interventions made by the user. For the facade, areas highlighted with hair have been created. This situation shows that there is a volumetric difference (4) from the self-assembly forms. New space was needed due to its small square meters. Therefore, the reason for self-contouring is that the dimensional adequacy (A) of the user requirements is not suitable. While emphasizing the facade, the space was expanded by adding user interventions to the existing container. Coding is shown on the right							
	29.Wall Clock/Table Clock	✓	PSYCHO-SOCIAL	S.N.	PRE-USAGE			POST-USAGE				
	30.Frame/Picture/Poster	✓			The container, which has been used for more than 1.5 years, shows the interventions made by the user. For the facade, areas highlighted with hair have been created. This situation shows that there is a volumetric difference (4) from the self-assembly forms. New space was needed due to its small square meters. Therefore, the reason for self-contouring is that the dimensional adequacy (A) of the user requirements is not suitable. While emphasizing the facade, the space was expanded by adding user interventions to the existing container. Coding is shown on the right							
	31.Figurine/ Vase	✓	PSYCHO-SOCIAL	S.N.	PRE-USAGE			POST-USAGE				
	32.Live Flower/Fake Flower/ Potted Plant	✓			The container, which has been used for more than 1.5 years, shows the interventions made by the user. For the facade, areas highlighted with hair have been created. This situation shows that there is a volumetric difference (4) from the self-assembly forms. New space was needed due to its small square meters. Therefore, the reason for self-contouring is that the dimensional adequacy (A) of the user requirements is not suitable. While emphasizing the facade, the space was expanded by adding user interventions to the existing container. Coding is shown on the right							
	33.Wall Sticker	✓	PSYCHO-SOCIAL	S.N.	PRE-USAGE			POST-USAGE				
	34. Facade Additions (Fence, Tarpaulin, etc.)	✓			The container, which has been used for more than 1.5 years, shows the interventions made by the user. For the facade, areas highlighted with hair have been created. This situation shows that there is a volumetric difference (4) from the self-assembly forms. New space was needed due to its small square meters. Therefore, the reason for self-contouring is that the dimensional adequacy (A) of the user requirements is not suitable. While emphasizing the facade, the space was expanded by adding user interventions to the existing container. Coding is shown on the right							
	35.Lighting	✓	PSYCHO-SOCIAL	S.N.	PRE-USAGE			POST-USAGE				
	36.Mirror	✓			The container, which has been used for more than 1.5 years, shows the interventions made by the user. For the facade, areas highlighted with hair have been created. This situation shows that there is a volumetric difference (4) from the self-assembly forms. New space was needed due to its small square meters. Therefore, the reason for self-contouring is that the dimensional adequacy (A) of the user requirements is not suitable. While emphasizing the facade, the space was expanded by adding user interventions to the existing container. Coding is shown on the right							
	37.Carpet	✓	PSYCHO-SOCIAL	S.N.	PRE-USAGE			POST-USAGE				
	38.Kitchen Utensils	✓			The container, which has been used for more than 1.5 years, shows the interventions made by the user. For the facade, areas highlighted with hair have been created. This situation shows that there is a volumetric difference (4) from the self-assembly forms. New space was needed due to its small square meters. Therefore, the reason for self-contouring is that the dimensional adequacy (A) of the user requirements is not suitable. While emphasizing the facade, the space was expanded by adding user interventions to the existing container. Coding is shown on the right							
	39.Coat Rack	✓	PSYCHO-SOCIAL	S.N.	PRE-USAGE			POST-USAGE				
	40.Curtain	✓			The container, which has been used for more than 1.5 years, shows the interventions made by the user. For the facade, areas highlighted with hair have been created. This situation shows that there is a volumetric difference (4) from the self-assembly forms. New space was needed due to its small square meters. Therefore, the reason for self-contouring is that the dimensional adequacy (A) of the user requirements is not suitable. While emphasizing the facade, the space was expanded by adding user interventions to the existing container. Coding is shown on the right							
	41.Laundry Basket	✓	PSYCHO-SOCIAL	S.N.	PRE-USAGE			POST-USAGE				
		The container, which has been used for more than 1.5 years, shows the interventions made by the user. For the facade, areas highlighted with hair have been created. This situation shows that there is a volumetric difference (4) from the self-assembly forms. New space was needed due to its small square meters. Therefore, the reason for self-contouring is that the dimensional adequacy (A) of the user requirements is not suitable. While emphasizing the facade, the space was expanded by adding user interventions to the existing container. Coding is shown on the right										
EXAMINATION												
 <p>Note: The facade is included in the additional area inspections.</p>	Sleeping Area		CODES 302,37W,20A,40 V,41Y, 41W,39B,30A,17 8,8A,7L 7M,7I,5Z 8A,17A	Wc/Bathroom		CODES 37W, 19Y, 7L,7M,7I	Entrance		CODES 7L,7M,7I,37W,37 Y,14B,19Z,32Z,30 Z,31Z, 14Y,5Z			
	Additional Area		CODES 4A,6O,2A,33Z,4O V,30Z,31Z,20A,5U 5V,22S,22Y,39Y, 37Y,16A,16B,12A, 12B,7U,17A,17Y, 5Z 6O 4A,7L,7M,7I,7A	Additional Area		CODES 4A,7L,7M,7I, 32Z,16B,12B 2A,7U,34Z,3 4R,34T,5Z 4A,7L,7M,7I, 7A	Living Area		CODES 7M,7L,7I,33Z,17 A,10I,29V,15Z,37 Y,37W,13Z,18A,2 7Y, 14Y,38B,24Y,5Z 15Z,15			

K2 Container: Through the conducted interviews, the interventions made by the disaster survivor in the container have been observed. The main reasons for these changes were specified by the survivor during the discussions. The changes made are shown in Figure 4.



Figure 4. Examples of personalization in the facade and interior of the container (Tarakçı, 2024)

The household consists of three people. They have covered the upper part of the container with a roof to extend it forward. Additionally, they explained in the discussions that they changed the flooring, acquired new furniture/items/accessories, and returned some of the provided furniture without using it. All examples of personalization in the container will be shown through the identity card.

All examples of personalization by the disaster survivor in the container are shown in Table 5, highlighted in the facade and plan.

Table 5. Facade and plan change drawings of K2 container (Tarakçı, 2023)

Pre-Usage Plan	Pre-Usage Facade
Current Plan	Current Facade

All examples of personalization in the container are shown in Table 6 through the identity card.

Table 6. Examination of the the Phenomenon of Self-Identification in the "K2" Container (Tarakçı, 2024)

IDENTITY CARD			K2						
GENERAL INFORMATION	Container Type	TYPE1	PRE-USAGE PLAN	PRE-USAGE FACADE	HOUSEHOLD POPULATION				
	Age	46							
	Gender	M F							
	Education Status	-							
	Employment Status	Retirement							
	Disability Status	-							
FORMS OF SELF-IDENTIFICATION			USER REQUIREMENTS						
SPATIAL OF SELF-IDENTIFICATION	Space	1. Positional Differences in the Area ✓ 2. Increase in the Number of Areas ✓ 3. Decrease in the Number of Areas ✓ 4. Volumetric Differences ✓	PHYSICAL	Spatial	A. Dimensional Adequacy ✓ B. Number of People Using the Space ✓ C. Age Appropriateness for Users ✓ D. Cultural Differences ✓ E. Level of Illumination ✓ F. Color of the Space ✓ G. Supply of Clean Water ✓				
	Surface	5. Changes in the Wall ✓ 6. Changes in the Floor ✓ 7. Changes in the Ceiling ✓		Health	H. Disposal of Waste Water ✓ I. Disposal of Trash and Other Waste ✓ J. Temperature ✓ K. Humidity ✓ L. Visual Comfort ✓ M. Auditory Comfort ✓ N. Olfactory Comfort ✓				
SURFACE SELF-IDENTIFICATION	Furniture	8. Bed ✓ 9. Bookshelf ✓ 10. Coffee Table ✓ 11. Nightstand ✓ 12. Folding Table ✓ 13. Tv Unit ✓ 14. Shoe Rack ✓ 15. Sofa/ Armchair ✓ 16. Chair ✓ 17. Cabinet ✓ 18. Kitchen Cabinet ✓ 18. Shelf ✓	P.E.C.	Safety	O. Structural Integrity Suitability ✓ P. Fire Safety Measures ✓ R. Theft Prevention Measures ✓ S. Accidents that could occur during actions ✓ T. Visual Privacy: Between Action Area ✓				
		Electrical Equipment			20. Refrigerator/Freezer ✓ 21. Television ✓ 22. Washing Machine ✓ 23. Dishwasher ✓ 24. Oven ✓ 25. Stove ✓ 26. Heater (electric) ✓ 27. Kettle ✓ 28. Toaster ✓	Privacy	U. Auditory Privacy 1 Background Noise ✓ 2 Sound Transition Between Neighboring Volums ✓ V. Personal Privacy ✓		
					Accessory-I		29. Wall Clock/Table Clock ✓ 30. Frame/Picture/Poster ✓ 31. Figurine/ Vase ✓ 32. Live Flower/Fake Flower/ Potted Plant ✓ 33. Wall Sticker ✓	A. B.	Y. Subjective Values Necessary for Action Areas ✓ Z. Values Based on Visual Impact (Dimensional Ratios, Color, etc.) ✓
							Accessory-II		34. Facade Additions (Fence, Tarpaulin, etc.) ✓ 35. Lighting ✓ 36. Mirror ✓ 37. Carpet ✓ 38. Kitchen Utensils ✓ 39. Coat Rack ✓ 40. Curtain ✓ 41. Laundry Basket ✓
	CODE CREATION SYSTEM			4A					
	PRE-USAGE	POST-USAGE	The container, which has been used for more than 1.5 years, shows the interventions made by the user. For the facade, areas highlighted with hair have been created. This situation shows that there is a volumetric difference (4) from the self-assembly forms. New space was needed due to its small square meters. Therefore, the reason for self-contouring is that the dimensional adequacy (A) of the user requirements is not suitable. While emphasizing the facade, the space was expanded by adding user interventions to the existing container. Coding is shown on the right						
	EXAMINATION								
	Note: The facade is included in the additional area inspections.	SLEEPING AREA	Additional Area	CODES 60,17B,17A,36Y 60	WC/Bathroom	CODES 60,19Y 60	ENTRANCE	CODES 17B,28Y,39Y,37Y,60,32Z 60	
				CODES 16B,12B,17B,34R,34V, 2A, 7L,7M,7J,4A,7A		CODES 2A,34R,34V,40I,40V,14B60,22G,23Y 60 4A,7L,7M,7J,7A		CODES 19Y,38Y,38B,37Y,12B,16B,60,20A,20B,20Y,15A 60,15A,15	

K3 Container: Through the conducted interviews, the interventions made by the disaster survivor in the container have been observed. The main reasons for these changes were specified by the survivor during the discussions. The interventions can also be understood from the interior and exterior visuals (Figure 5).



Figure 5. Examples of personalization in the facade and interior of the container (Tarakçı, 2024)

The household consists of six people. They have covered the upper part of the container with a roof to extend it forward. Additionally, they explained in the discussions that they changed the flooring, acquired new furniture/items/accessories, and returned some of the provided furniture without using it. There are two individuals in the household aged 23 and 25 who have mobility issues due to being trapped under rubble during the earthquake. All examples of personalization in the container will be shown through the identity card.

All examples of personalization by the disaster survivor in the container are shown in Table 7, highlighted in the facade and plan.

Table 7. Facade and plan change drawings of K3 container (Tarakçı, 2023)

Pre-Usage Plan	Pre-Usage Facade
Current Plan	Current Facade

All examples of personalization in the container are shown in Table 8 through the identity card.

Table 8. Examination of the Phenomenon of Self-Identification in the "K3" Container (Tarakçı, 2024)

IDENTITY CARD		K3							
GENERAL INFORMATION	Container Type	TYPE1							
	Age	45							
	Gender	M	F						
	Education Status	-							
	Employment Status	Retirement							
	Disability Status	-							
PRE-USAGE PLAN		PRE-USAGE FACADE							
	HOUSEHOLD POPULATION								
			6						
FORMS OF SELF-IDENTIFICATION									
SPATIAL OF SELF-IDENTIFICATION	Space	1. Positional Differences in the Area	✓						
	Surface	2. Increase in the Number of Areas	✓						
SURFACE SELF-IDENTIFICATION	Furniture	3. Decrease in the Number of Areas	✓						
		4. Volumetric Differences	✓						
		5. Changes in the Wall	✓						
		6. Changes in the Floor	✓						
		7. Changes in the Ceiling	✓						
		8. Bed	✓						
		9. Bookshelf	✓						
	10. Coffee Table	✓							
	11. Nightstand	✓							
	12. Folding Table	✓							
	13. Tv Unit	✓							
	14. Shoe Rack	✓							
	15. Sofa/ Armchair	✓							
	16. Chair	✓							
	17. Cabinet	✓							
	18. Kitchen Cabinet	✓							
	18. Shelf	✓							
	Electrical Equipment	20. Refrigerator/Freezer	✓						
		21. Television	✓						
		22. Washing Machine	✓						
		23. Dishwasher	✓						
24. Oven		✓							
25. Stove		✓							
26. Heater (electric)		✓							
27. Kettle		✓							
Accessory-I	29. Wall Clock/Table Clock	✓							
	30. Frame/Picture/Poster	✓							
	31. Figurine/ Vase	✓							
	32. Live Flower/Fake Flower/ Potted Plant	✓							
	33. Wall Sticker	✓							
	Accessory-II	34. Facade Additions (Fence, Tarpaulin, etc.)	✓						
		35. Lighting	✓						
		36. Mirror	✓						
		37. Carpet	✓						
		38. Kitchen Utensils	✓						
39. Coat Rack		✓							
40. Curtain		✓							
41. Laundry Basket		✓							
USER REQUIREMENTS									
PHYSICAL	Spatial	A. Dimensional Adequacy	✓						
		B. Number of People Using the Space	✓						
		C. Age Appropriateness for Users	✓						
		D. Cultural Differences	✓						
		E. Level of Illumination	✓						
		F. Color of the Space	✓						
		G. Supply of Clean Water	✓						
	Health	H. Disposal of Waste Water	✓						
		I. Disposal of Trash and Other Waste	✓						
		J. Temperature	✓						
P.E.C.	K. Humidity	✓							
	L. Visual Comfort	✓							
	M. Auditory Comfort	✓							
Safety	N. Olfactory Comfort	✓							
	O. Structural Integrity Suitability	✓							
	P. Fire Safety Measures	✓							
	R. Theft Prevention Measures	✓							
	S. Accidents that could occur during actions	✓							
PSYCHO-SOCIAL	Privacy	T. Visual Privacy: Between Action Area	✓						
		U. Auditory Privacy	1 Background Noise	✓					
		2 Sound Transition Between Neighboring Volumes	✓						
	V. Personal Privacy	✓							
	B.	Y. Subjective Values Necessary for Action Areas	✓						
		Z. Values Based on Visual Impact (Dimensional Ratios, Color, etc.)	✓						
	S.N.	X. Family Structures	✓						
		W. Lifestyle Preferences	✓						
		Q. Relationships Between Users	✓						
		USER INTERVENTIONS							
Addition		✓							
Cancellation/Modification	✓								
Transformation	✓								
Expansion	✓								
Division	✓								
K1 CONTAINER DRAWINGS									
CURRENT FACADE									
CURRENT PLAN									
CODE CREATION SYSTEM									
PRE-USAGE			The container, which has been used for more than 1.5 years, shows the interventions made by the user. For the facade, areas highlighted with hair have been created. This situation shows that there is a volumetric difference (4) from the self-assembly forms. New space was needed due to its small square meters. Therefore, the reason for self-contouring is that the dimensional adequacy (A) of the user requirements is not suitable. While emphasizing the facade, the space was expanded by adding user interventions to the existing container. Coding is shown on the right.						
POST-USAGE			4A 4A						
EXAMINATION									
	Sleeping Area		CODES 7U,60,5M,5U ,17B,37Y 60,	Wc/Bathroom		CODES 7U,60,5M ,5U,19Y 60,	Entrance		CODES 7U,60,5M,5U ,15B,15A,35E, 37Y
	Additional Area		CODES 34V,7U,60,5 M,5U, 2A,14B,17A,1 8A,20B,20A,2 3B,36Y,38B, 37Y 60 4A,7L,7M,7I,7 A	Additional Area		CODES 34V,34E,34N ,34R,7U,60, 5M,5U,2A,4 0V,5E,8B,12 8,16B,29Y,3 5E,37Y,40T 60, 4A,4B,7L,7M ,7I,7U,7A,	Living Area		CODES 60,1N,1P,1B, 15,15A
Note: The facade is included in the additional area inspections.									

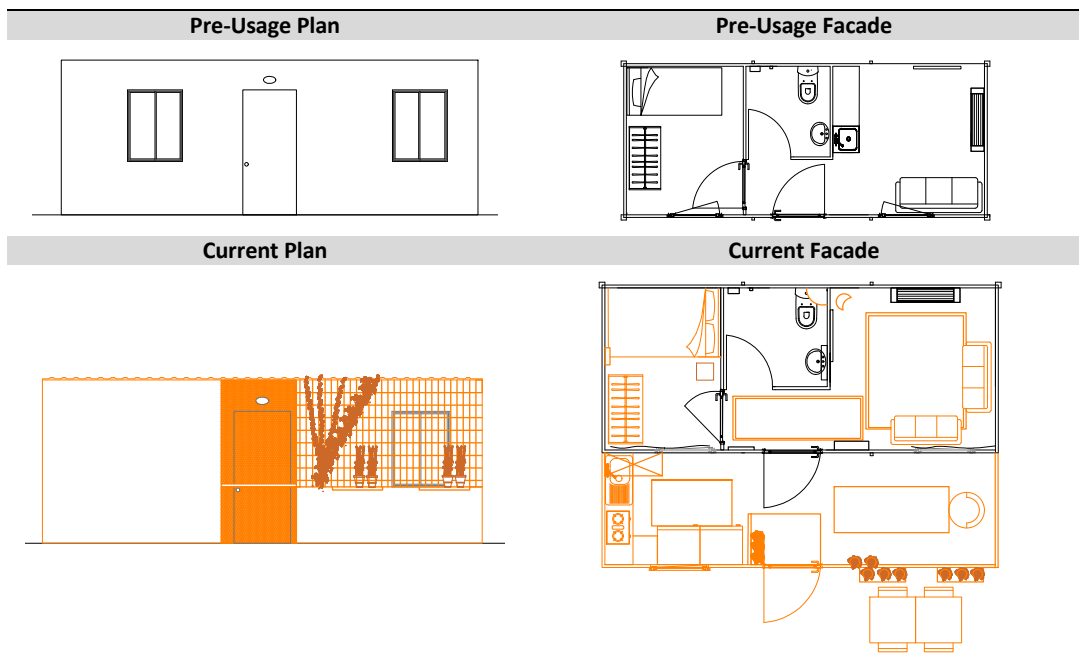
K4 Container: Through the conducted interviews, it has been observed that there were several interventions made to the container by the disaster survivor. The main reasons for these changes were specified by the survivor based on their needs. The personalization behavior resulting from the interventions in the interior and exterior is shown in Figure 6.



Figure 6. Examples of personalization in the facade and interior of the container (Tarakçı, 2024)

The household consists of five people. They have covered the upper part of the container with a roof to extend it forward. Additionally, they explained in the discussions that they changed the flooring, acquired new furniture/items/accessories, and returned some of the provided furniture without using it. There are three small children in the household. The user mentioned that many of the personalization behaviors in the container were done for their children, and all examples of personalization in the container are shown in Table 9, highlighted in the facade and plan.

Table 9. Facade and plan change drawings of K3 container (Tarakçı, 2023)



All examples of personalization in the container are shown in Table 10 through the identity card.

Table 10. Examination of the the Phenomenon of Self-Identification in the "K4" Container (Tarakçı, 2024)

IDENTITY CARD						K4											
GENERAL INFORMATION	Container Type	TYPE1	PRE-USAGE PLAN	PRE-USAGE FACADE	HOUSEHOLD POPULATION	5											
	Age	45															
	Gender	M F															
	Education Status	-															
	Employment Status	P.Sector															
Disability Status	-																
FORMS OF SELF-IDENTIFICATION			USER REQUIREMENTS			USER INTERVENTIONS											
SPATIAL OF SELF-IDENTIFICATION	Space	1. Positional Differences in the Area 2. Increase in the Number of Areas 3. Decrease in the Number of Areas	PHYSICAL	Spatial	A. Dimensional Adequacy B.Number of People Using the Space C.Age Appropriateness for Users D.Cultural Differences E.Level of Illumination F.Color of the Space G.Supply of Clean Water	Addition		✓									
	Surface	4. Volumetric Differences 5.Changes in the Wall 6.Changes in the Floor 7. Changes in the Ceiling		Health	H.Disposal of Waste Water I. Disposal of Trash and Other Waste	Cancellation/Modification	✓	Transformation	✓								
SURFACE SELF-IDENTIFICATION	Furniture	8. Bed 9. Bookshelf 10.Coffee Table 11.Nightstand 12. Folding Table 13.Tv Unit 14. Shoe Rack 15.Sofa/ Armchair 16.Chair 17.Cabinet 18. Kitchen Cabinet 18. Shelf	P.E.C.	J.Temperature K.Humidity L.Visual Comfort M.Auditory Comfort N.Olfactory Comfort	Expansion	✓	Division	✓									
		Electrical Equipment		20.Refrigerator/Freezer 21.Television 22.Washing Machine 23.Dishwasher 24.Oven 25.Stove 26.Heater (electric) 27.Kettle 28.Toaster	Safety	O.Structural Integrity Suitability P.Fire Safety Measures R.Theft Prevention Measures S.Accidents that could occur during actions T. Visual Privacy: Between Action Area	K1 CONTAINER DRAWINGS										
				Accessory-I		29.Wall Clock/Table Clock 30.Frame/Picture/Poster 31.Figurine/ Vase 32.Live Flower/Fake Flower/ Potted Plant 33.Wall Sticker	Privacy	U.Auditory Privacy 1Background Noise 2Sound Transition Between Neighboring Volumes V.Personal Privacy	CURRENT FACADE		CURRENT PLAN						
						Accessory-II		34. Facade Additions (Fence, Tarpaulin, etc.) 35.Lighting 36.Mirror 37.Carpet 38.Kitchen Utensils 39.Coat Rack 40.Curtain 41.Laundry Basket	B.	Y.Subjective Values Necessary for Action Areas Z.Values Based on Visual Impact (Dimensional Ratios, Color,etc.)	The container, which has been used for more than 1.5 years, shows the interventions made by the user. For the facade, areas highlighted with hair have been created. This situation shows that there is a volumetric difference (4) from the self-assembly forms. New space was needed due to its small square meters. Therefore, the reason for self-contouring is that the dimensional adequacy (A) of the user requirements is not suitable. While emphasizing the facade, the space was expanded by adding user interventions to the existing container. Coding is shown on the right						
								CODE CREATION SYSTEM			PRE-USAGE				POST-USAGE		
	EXAMINATION							4A				4A					
	Sleeping Area				Wc/Bathroom					Entrance							
	Additional Area			Additional Area				Living Area									
	CODES			CODES				CODES									
	60,7U,8B,19Z,31Z 60,8A,8B,17A			62,19B 60				7U,60,36Y,37Y,36Z 60									
2A,5I,5A,5T,5V,5P,5Z,5A 60,4A,7U,18A,18B,22G,27Y,34T,34V,35E,37Y,38B,24B,24Y			4A,2A,7U,14B,32Z,33,9B,16B,12B,37Y,34Y,34T,34V,34R,39B				5Z,60,7U,10Y,15B,15A,19Y,19Z,29Y,30Z,31Z,33Z,37Y,40Z,40T,40V,5Z 1P,1S,60,										
60, 4A,7Y,7J,			60, 4A,7Y,7J,				-										
Note: The facade is included in the additional area inspections.																	

K5 Container: Through the conducted interviews, it has been observed that there were several interventions made to the container by the disaster survivor. The main reasons for these changes were specified by the survivor based on their needs. The changes made are shown in Figure 7.

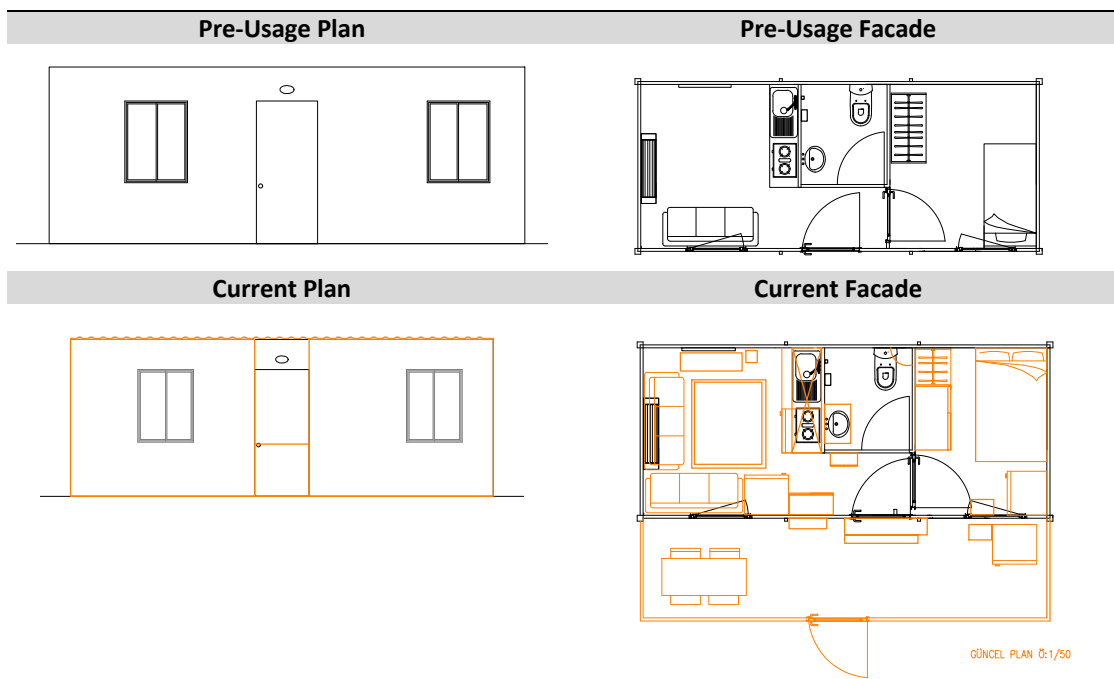


Figure 7. Examples of personalization in the facade and interior of the container (Tarakçı, 2024)

The household consists of five people. They have covered the upper part of the container with a roof to extend it forward. Additionally, they explained in the discussions that they changed the flooring, acquired new furniture/items/accessories, and returned some of the provided furniture without using it. There are three small children in the household. The user mentioned that many of the personalization behaviors were done for their children, and all examples of personalization in the container will be shown through the identity card.

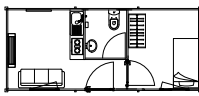
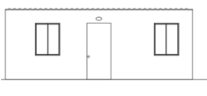
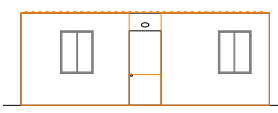
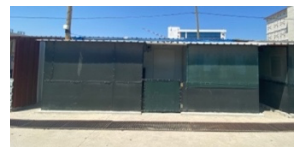
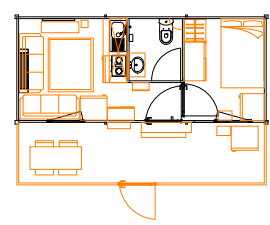


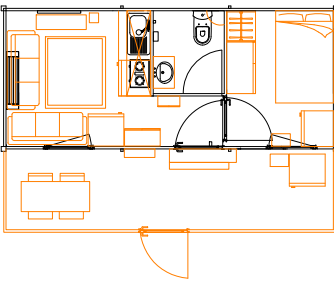

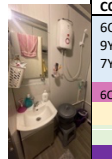


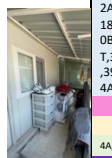

All examples of personalization by the disaster survivor in the container are shown in Table 11, highlighted in the facade and plan.

Table 11. Drawings of the facade and plan changes of the K5 container (Tarakçı, 2023)



All examples of personalization in the container are shown in Table 12 through the identity card.

Table 12. Examination of the the Phenomenon of Self-Identification in the "K5" Container (Tarakçı, 2024)

IDENTITY CARD		K5							
GENERAL INFORMATION	Container Type	TYPE1							
	Age	41							
	Gender	M	F						
	Education Status	Licence							
	Employment Status	Housewife							
Disability Status	-								
PRE-USAGE PLAN		PRE-USAGE FACADE							
									
		HOUSEHOLD POPULATION							
		5							
FORMS OF SELF-IDENTIFICATION									
SPATIAL OF SELF-IDENTIFICATION	Space	1. Positional Differences in the Area	✓						
	Surface	2. Increase in the Number of Areas	✓						
SURFACE SELF-IDENTIFICATION	Furniture	3. Decrease in the Number of Areas	✓						
		4. Volumetric Differences	✓						
ELECTRICAL EQUIPMENT	Accessory-I	5. Changes in the Wall	✓						
		6. Changes in the Floor	✓						
ACCESSORY-II	Accessory-II	7. Changes in the Ceiling	✓						
		8. Bed	✓						
ELECTRICAL EQUIPMENT	Accessory-I	9. Bookshelf	✓						
		10. Coffee Table	✓						
ACCESSORY-II	Accessory-II	11. Nightstand	✓						
		12. Folding Table	✓						
ELECTRICAL EQUIPMENT	Accessory-I	13. Tv Unit	✓						
		14. Shoe Rack	✓						
ACCESSORY-II	Accessory-II	15. Sofa/ Armchair	✓						
		16. Chair	✓						
ELECTRICAL EQUIPMENT	Accessory-I	17. Cabinet	✓						
		18. Kitchen Cabinet	✓						
ACCESSORY-II	Accessory-II	18. Shelf	✓						
		20. Refrigerator/Freezer	✓						
ELECTRICAL EQUIPMENT	Accessory-I	21. Television	✓						
		22. Washing Machine	✓						
ACCESSORY-II	Accessory-II	23. Dishwasher	✓						
		24. Oven	✓						
ELECTRICAL EQUIPMENT	Accessory-I	25. Stove	✓						
		26. Heater (electric)	✓						
ACCESSORY-II	Accessory-II	27. Kettle	✓						
		28. Toaster	✓						
ELECTRICAL EQUIPMENT	Accessory-I	29. Wall Clock/Table Clock	✓						
		30. Frame/Picture/Poster	✓						
ACCESSORY-II	Accessory-II	31. Figurine/ Vase	✓						
		32. Live Flower/Fake Flower/ Potted Plant	✓						
ELECTRICAL EQUIPMENT	Accessory-I	33. Wall Sticker	✓						
		34. Facade Additions (Fence, Tarpaulin, etc.)	✓						
ACCESSORY-II	Accessory-II	35. Lighting	✓						
		36. Mirror	✓						
ELECTRICAL EQUIPMENT	Accessory-I	37. Carpet	✓						
		38. Kitchen Utensils	✓						
ACCESSORY-II	Accessory-II	39. Coat Rack	✓						
		40. Curtain	✓						
ELECTRICAL EQUIPMENT	Accessory-I	41. Laundry Basket	✓						
USER REQUIREMENTS									
PHYSICAL	Spatial	A. Dimensional Adequacy	✓						
		B. Number of People Using the Space	✓						
		C. Age Appropriateness for Users							
		D. Cultural Differences							
		E. Level of Illumination							
		F. Color of the Space							
	Health	G. Supply of Clean Water	✓						
		H. Disposal of Waste Water							
		I. Disposal of Trash and Other Waste							
		J. Temperature	✓						
P.E.C.	K. Humidity								
	L. Visual Comfort	✓							
	M. Auditory Comfort								
	N. Olfactory Comfort								
Safety	O. Structural Integrity Suitability	✓							
	P. Fire Safety Measures	✓							
	R. Theft Prevention Measures	✓							
	S. Accidents that could occur during actions								
PSYCHO-SOCIAL	Privacy	T. Visual Privacy: Between Action Area	✓						
		U. Auditory Privacy	1 Background Noise ✓ 2 Sound Transition Between Neighboring Volumes ✓						
	V. Personal Privacy	✓							
	B.	Y. Subjective Values Necessary for Action Areas	✓						
A.	Z. Values Based on Visual Impact (Dimensional Ratios, Color, etc.)	✓							
S.N.	X. Family Structures								
W. Lifestyle Preferences									
Q. Relationships Between Users									
USER INTERVENTIONS									
Addition		✓							
Cancellation/Modification		✓							
Transformation		✓							
Expansion		✓							
Division		✓							
K1 CONTAINER DRAWINGS									
CURRENT FACADE									
CURRENT FACADE									
CURRENT PLAN									
CODE CREATION SYSTEM									
PRE-USAGE		POST-USAGE							
The container, which has been used for more than 1.5 years, shows the interventions made by the user. For the facade, areas highlighted with hair have been created. This situation shows that there is a volumetric difference (4) from the self-assembly forms. New space was needed due to its small square meters. Therefore, the reason for self-contouring is that the dimensional adequacy (A) of the user requirements is not suitable. While emphasizing the facade, the space was expanded by adding user interventions to the existing container. Coding is shown on the right.			4A 4A						
EXAMINATION									
 <p>Note: The facade is included in the additional area inspections.</p>	Sleeping Area		CODES 60,52,88,11Y,17,18,17A,19B,19A,20B,31Z,36Z,36Y,40Z,40T,40V,41B,41Y,37Y,39B, 60,8A,8B,17A	Wc/ bathroom		CODES 60,19B,19Y,17A,17Y,17Z 60	Entrance		CODES 60,17B,31Z,37Y,38A 60
	Additional Area		CODES 2A,7U,12B,14B,15B,34T,34V,34R,4A 4A,7I,7A,7Y	Additional Area		CODES 2A,7U,6S,18B,18Y,20B,22G,34T,34V,34R,39B,37Y,4A 4A,7I,7A,7Y	Living Area		CODES 5Z,60,7U,10Y,15B,15A,19Y,19Z,29Y,30Z,31Z,33Z,37Y,40Z,40T,40V,5Z 1P,1S,60

When examining the personalization phenomena in the K1, K2, K3, K4, and K5 containers:

In the K1 container, it is observed that various forms of personalization are present. These forms include frames, paintings, television units, folding tables, coffee tables, shoe racks, sofas, armchairs, changes on the wall, changes on the ceiling, changes in the flooring, cabinets, volumetric increases, beds, kitchen cabinets, shelves, refrigerators, freezers, washing machines, kettles, wall clocks, number

of areas, figurines, vases, live flowers, artificial flowers, wall stickers, fences, carpets, various kitchen utensils, curtains, and laundry baskets. Looking at user interventions, the added elements are as follows: frames, paintings, television units, folding tables, coffee tables, shoe racks, sofas, armchairs, changes on the wall, changes on the ceiling, changes in the flooring, cabinets, volumetric increases, beds, kitchen cabinets, shelves, refrigerators, freezers, washing machines, kettles, wall clocks, number of areas, figurines, vases, live flowers, artificial flowers, wall stickers, fences, carpets, various kitchen utensils, curtains, and laundry baskets. The canceling or changing interventions occurred in the form of beds, cabinets, sofas/armchairs, changes in the flooring, and positional differences in the area. The area where the change intervention was made is the kitchen; the location of the kitchen sink has been changed. In the expansion intervention, volumetric differences with an increase in square meters and the extension of the ceiling forward with a roof have been observed. There were no transformation or partitioning interventions made. It has been determined that the needs for personalization are related to dimensional adequacy, the number of people using the space, clean water supply, temperature/rainfall, visual comfort, auditory comfort, structural integrity, theft prevention, accidents that may occur during actions, visual privacy, auditory privacy, personal privacy, subjective values necessary for the action areas of individuals, values based on visual impact, and lifestyle preferences.

In the K2 container, various forms of personalization are also present. These forms include chairs, changes in the flooring, cabinets, mirrors, shelves, toasters, drying racks, number of areas, changes on the ceiling, live flowers or artificial flowers, folding tables, facade additions, curtains, shoe racks, washing machines, wall clocks or table clocks, kitchen utensils, carpets, sofas or armchairs, and refrigerators or freezers. Looking at user interventions, the added elements include chairs, changes in the flooring, cabinets, mirrors, shelves, toasters, drying racks, number of areas, changes on the ceiling, live flowers or artificial flowers, folding tables, facade additions, curtains, shoe racks, washing machines, wall clocks or table clocks, kitchen utensils, carpets, sofas or armchairs, and refrigerators or freezers. The canceling or changing interventions occurred in the form of sofas, positional differences in the area, and on the flooring. The area where the change intervention was made is the kitchen; the location of the kitchen sink has been changed. The expansion interventions involve volumetric differences with an increase in square meters and the extension of the ceiling forward with a roof. There were no transformation or partitioning interventions made. It has been determined that the needs for personalization are related to dimensional adequacy, the number of people using the space, clean water supply, temperature/rainfall, visual comfort, auditory comfort, structural integrity, theft prevention, accidents that may occur during actions, visual privacy, auditory privacy, personal privacy, subjective values necessary for the action areas of individuals, values based on visual impact, and lifestyle preferences. In the K3 container, various forms of personalization are observed. These forms include positional differences in the area, an increase in the number of areas, volumetric differences, changes on the wall, flooring, and ceiling, beds, folding tables, shoe racks, sofas/armchairs, chairs, cabinets, shelves, kitchen cabinets, refrigerators/freezers, dishwashers, wall clocks/table clocks, facade additions (fences, tarpaulins, etc.), lighting, carpets, kitchen utensils, and curtains. Looking at user interventions, the added elements are as follows: positional differences, an increase in the number of areas, volumetric differences, changes on the wall, flooring, and ceiling, beds, folding tables, shoe racks, sofas/armchairs, chairs, cabinets, shelves, kitchen cabinets, refrigerators/freezers, dishwashers, wall clocks/table clocks, facade additions (fences, tarpaulins, etc.), lighting, carpets, kitchen utensils, and curtains. The canceling or changing interventions occurred in the form of changes in the flooring, positional changes in the area, and sofas/armchairs. The area where the change intervention was made is the kitchen; the location of the kitchen has been changed and moved outside. In the expansion intervention, volumetric differences with an increase in square meters and the extension of the ceiling forward with a roof have been observed. There were no transformation or partitioning interventions made. It has been determined that the needs for personalization are related to dimensional adequacy, the number of people using the space, lighting levels, temperature/rainfall, visual comfort, auditory comfort, olfactory comfort, structural integrity, fire prevention, theft prevention, accidents that may occur during actions, visual privacy, auditory privacy, personal privacy, subjective values necessary for the action areas of individuals, and values based on visual impact.

In the K4 container, various forms of personalization are also present. These forms include positional differences in the area, an increase in the number of areas, volumetric differences, changes on the wall, flooring, and ceiling, beds, coffee tables, folding tables, shoe racks, sofas/armchairs, chairs, cabinets, shelves, kitchen cabinets, washing and dishwashing machines, kettles, wall clocks/table clocks, frames/posters, figurines/vases, live flowers, wall stickers, facade additions (fences, tarpaulins, etc.), lighting, mirrors, carpets, kitchen utensils, coat racks, and curtains. Looking at user interventions, the added elements are as follows: positional differences in the area, an increase in the number of areas, volumetric differences, changes on the wall, flooring, and ceiling, beds, coffee tables, folding tables, shoe racks, sofas/armchairs, chairs, cabinets, shelves, kitchen cabinets, washing and dishwashing machines, kettles, wall clocks/table clocks, frames/posters, figurines/vases, live flowers, wall stickers, facade additions (fences, tarpaulins, etc.), lighting, mirrors, carpets, kitchen utensils, coat racks, and curtains. The canceling or changing interventions occurred in the form of changes in the flooring, positional changes in the area, and beds and cabinets. The area where the change intervention was made is the kitchen; the location of the kitchen has been changed and moved outside. In the expansion intervention, volumetric differences with an increase in square meters and the extension of the ceiling forward with a roof have been observed. There were no transformation or partitioning interventions made. It has been determined that the needs for personalization are related to dimensional adequacy, the number of people using the space, lighting levels, clean water supply, temperature/rainfall, visual comfort, auditory comfort, structural integrity, fire prevention, theft prevention, accidents that may occur during actions, visual privacy, auditory privacy, personal privacy, subjective values necessary for the action areas of individuals, and values based on visual impact. In the K5 container, various forms of personalization are also observed. These forms include positional differences in the area, an increase in the number of areas, volumetric differences, changes on the wall, flooring, and ceiling, beds, folding tables, shoe racks, sofas/armchairs, chairs, cabinets, shelves, kitchen cabinets, refrigerators, washing and dishwashing machines, kettles, ovens, stoves, wall clocks/table clocks, frames/posters, figurines/vases, live flowers, wall stickers, facade additions (fences, tarpaulins, etc.), mirrors, carpets, kitchen utensils, coat racks, curtains, and laundry baskets. Looking at user interventions, the added elements are as follows: positional differences in the area, an increase in the number of areas, volumetric differences, changes on the wall, flooring, and ceiling, beds, folding tables, shoe racks, sofas/armchairs, chairs, cabinets, shelves, kitchen cabinets, refrigerators, washing and dishwashing machines, kettles, ovens, stoves, wall clocks/table clocks, frames/posters, figurines/vases, live flowers, wall stickers, facade additions (fences, tarpaulins, etc.), mirrors, carpets, kitchen utensils, coat racks, curtains, and laundry baskets. The canceling or changing interventions occurred in the form of changes in the flooring, beds, and cabinets. In the expansion intervention, volumetric differences with an increase in square meters and the extension of the ceiling forward with a roof have been observed. There were no transformation or partitioning interventions made. It has been determined that the needs for personalization are related to dimensional adequacy, the number of people using the space, clean water supply, temperature/rainfall, visual comfort, structural integrity, theft prevention, visual privacy, auditory privacy, personal privacy, subjective values necessary for the action areas of individuals, and values based on visual impact. These five containers, various forms of personalization are observed, including positional differences in the area, an increase in the number of areas, volumetric differences, and changes on the wall, flooring, and ceiling. Additionally, various items such as beds, folding tables, shoe racks, sofas/armchairs, chairs, cabinets, shelves, kitchen cabinets, kitchen utensils, carpets, facade additions (fences, tarpaulins, etc.), and curtains have been added. Among the most frequently added items are kitchen utensils and furniture, particularly kitchen cabinets, refrigerators, and washing machines, which have been added frequently by users. The interventions made in these containers include common practices such as additions, changes in the flooring, and changes on the wall and ceiling. Furthermore, expansion interventions such as volumetric increases and increases in square meters have also been observed. However, transformation and partitioning interventions have generally not been made. In terms of personalization needs, factors such as dimensional adequacy, the number of people using the space, clean water supply, temperature/rainfall, visual comfort, auditory comfort, structural integrity, theft

prevention, accidents that may occur during actions, visual privacy, auditory privacy, personal privacy, and individual lifestyle preferences have been collectively identified.

4. Conclusion and Suggestions

The ability of disaster victims to maintain their daily routines and habits in temporary housing areas contributes to their resilience and adaptability in rebuilding their lives after disasters. These factors reduce feelings of insecurity, alienation, and loss of control, providing a sense of belonging and security. This research demonstrates that the personalization phenomena in containers are shaped by various factors such as users' needs, aesthetic preferences, security concerns, and social interactions. It is evident that disaster victims transform standard container units according to their needs, habits, and cultural expectations. In this process, disaster victims create familiar and personal living spaces by transforming the limited spatial conditions in line with their daily needs, habits, and expectations. In this context, it is understood that living spaces are in a constant state of change and transformation as dynamic structures. These findings emphasize the importance of a user-centered approach in architectural and interior design. Containers with the same spatial characteristics can exhibit different forms of personalization and interventions. The differing physical and psychosocial requirements play a significant role here. The additions made in the containers reflect users' needs to enhance their daily living comfort. The frequent addition of kitchen utensils and furniture indicates users' desire to make the space functional. This situation reveals that users continuously make changes to make their living spaces more functional and comfortable. The observed positional differences and volumetric changes in the containers demonstrate the flexibility of the space and its openness to change. This indicates that living spaces can be dynamically restructured and shaped according to users' needs. Particularly, expansion interventions signify users' desire to utilize the space more efficiently. Aesthetic interventions such as changes to walls, flooring, and ceilings are also included among the forms of personalization. It is understood that users are making efforts to personalize their living spaces while prioritizing visual comfort. This situation shows that aesthetic concerns are as important as functionality. The inclusion of elements such as theft prevention, visual, and auditory privacy among personalization needs indicates that users place importance on security and privacy issues. This suggests that living spaces should be evaluated not only in terms of functionality but also in terms of security and privacy. It can be said that the changes made in the containers reflect users' sensitivity to resource management and sustainability. Particularly, the emphasis on clean water supply and structural integrity indicates users' awareness of environmental factors. The increase in the number of areas in the containers highlights the importance of social interaction and space sharing. Users organize their living spaces not only for individual needs but also to enhance social interactions. This situation illustrates how social life interacts with spatial arrangements.

In conclusion, the phenomenon of personalization by disaster victims in containers significantly contributes to their psychological, social, and physical recovery processes. In this context, it is essential that post-disaster housing spaces are designed to allow for personalization. A user-centered approach should be adopted in the design of container living spaces, taking into account the needs and expectations of disaster victims. Proactive measures should be taken before designing temporary housing units. These measures should be based on the experiences of disaster victims without overlooking their needs. At this point, the strategies to be implemented in the designs of temporary housing units are crucial. More livable spaces should be designed by combining existing strategies in the literature with the experiences of disaster victims. It should be noted that while fundamental requirements such as livability and functionality are met, creating common areas that enhance social interaction and increasing security measures will improve the quality of life for disaster victims.

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All authors contributed equally to the article. There is no conflict of interest.

References

- Alsibaai, L., & Özcan, U. (2022). Changes in user requirements in architecture and their reflections on building programs. *International Journal of Social and Humanities Sciences (IJSHS)*, 6(2), 139-165.
- Altman, I., & Zube, H. E. (1989). *Public places and spaces*. New York: Plenum Press.
- Armağan, B. (1997). *Examining user satisfaction in high-rise housing applications from the perspective of psycho-social requirements*. Master's thesis, Istanbul Technical University Institute of Science, 85 p., Istanbul.
- Atasoy, A. (1973). Developing housing design in response to changing needs through evaluation of existing housing. ITU Faculty of Architecture, Istanbul.
- Ateş, M. (1988). *A study on approaches for flexibility in mass housing*. Master's thesis, ITU Institute of Science, Istanbul.
- Aubert-Gamet, V. (1997). Twisting servicescapes: Diversion of the physical environment in a re-appropriation process. *International Journal of Service Industry Management*, 8(1), 26-41.
- Ayataç, H., & Güney, Y. İ. (2016). Evaluating user experiences in temporary housing solutions after disasters. *ITU Journal/a*, 15(1).
- Bayazıt, N. (1982). Participation in planning and designing. ITU Faculty of Architecture, Istanbul.
- Benages-Albert, M., Di Masso, A., Porcel, S., Pol, E., & Vall-casas, P. (2015). Revisiting the appropriation of space in metropolitan river corridors. *Journal of Environmental Psychology*, 42, 1-15.
- Bilgin, N. (1990). From physical space to human space. *Architecture Journal*, 28(3), 62-65.
- Bilgin, N., (1991). *Things and People*. Gündoğan Yayınları, Ankara.
- Bilgin, N. (1997). *Place identity and urban citizenship*. In *Politics and Human* (pp. 102-110). Istanbul: Bağlam Publishing.
- Bilgin, N., (2011). *Things and People*, Istanbul, Gündoğan Yayınları, 2. Basım.
- Bonnes, M., & Secchiaroli, G. (1995). *Environmental psychology: A psycho-social introduction*. London: Sage Publications.
- Bonnin, G. (2006). Physical environment and service experience: An appropriation-based model. *Journal of Services Research*, 6, Special Issue, 45-65.
- Brooker, G., & Stone, S. (2011). *What is interior design?* Istanbul: Yem Publications.
- Brunson, L., Kuo, F. E., & Sullivan, W. C. (2001). Resident appropriation of defensible space in public housing: Implications for safety and community. *Environment and Behavior*, 33(5), 626-652.
- Buğday, H. A. (1991). *An architectural design research aimed at meeting different user requirements in industrialized mass housing*. Master's thesis, Istanbul: Istanbul Technical University Institute of Science. Access Address (12.12.2019): <https://tez.yok.gov.tr/UlusalTezMerkezi/giris.jsp>
- Cilliers, J. E., Timmermans, W., den Goorbergh, F. V., & Slijkhuis, J. (2015). Green place-making in practice: From temporary spaces to permanent places. *Journal of Urban Design*, 20(3), 349-366.
- Cresswell, T., 2014. *Place: An Introduction*, John Wiley & Sons.
- Çavdar, A., & Çabuk, A. (2016). The personalization process in temporary housing areas: An example of a tent city established after the earthquake. *Megaron*, 11(1).

- Doan, P. L., & Yamazaki, J. (2020). Sense of place in temporary housing after natural disasters. *Disasters*, 44(2), 373-393.
- Dovey, K. (1985). The quest for authenticity and the replication of environmental meaning. In *Dwelling, place and environment* (pp. 33-49).
- Dönmez, Y., Özyavuz, M., & Gökyer, E. (2015). Determining the green space conditions of housing and site areas in the city of Safranbolu. *Inönü University Journal of Art and Design*, 5(11), 1-12.
- Duruel, M. (2023). The role of civil society organizations in disaster management: The example of the February 6 earthquake in Hatay. *International Journal of Political Studies*, 9(2), 1-17.
- Ertaş Beşir, Ş., & Dereci, Ş. (2021). Risks Posed by Non-Structural Elements in Residential Interiors During an Earthquake and Preventive Measures, *International Social Mentality and Researcher Thinkers Journal*, (Issn:2630-631X) 7(42): 350- 360.
- Esteban-Guitart, M. (2014). Appropriation. In T. Teo (Ed.), *Encyclopedia of critical psychology* (pp. 128-132). New York, US: Springer.
- Feldman, R. M., & Stall, S. (2004). *The dignity of resistance: Women residents' activism in Chicago public housing*. Cambridge: Cambridge University Press.
- Fischer, G. N. (1981). *La psychosociologie de l'espace*. Paris: PUF.
- Göregenli, M. (2021). *Environmental psychology: Human-space relationships*. Istanbul: Bilgi University Publications.
- Graumann, C. F. (1976). The concept of appropriation (Aneignung) and modes of appropriation of space. In P. Korosec-Serfaty (Ed.), *Proceedings of the 3rd International Architectural Psychology Conference* (pp. 113-125). Strasbourg, France: Louis Pasteur University.
- Graumann, C. F. (2002). The phenomenological approach to people-environment studies. In R. B. Bechtel & A. Churchman (Eds.), *Handbook of environmental psychology* (pp. 95-113). New York, US: John Wiley & Sons.
- Gül, B. (1993). *Solving the user-environment adaptation problem during the design process. Master's thesis, Istanbul: Istanbul Technical University Institute of Science. Access Address (12.12.2019): <https://tez.yok.gov.tr/UlusalTezMerkezi/giris.jsp>*
- Günal, B. (2006). *Examining the psycho-social quality in housing within the context of the human-space communication model (PhD thesis), Istanbul Technical University Institute of Science, Istanbul.*
- Gür, Ö.Ş. (1996). *Spatial organization*. Trabzon: Gür Publishing.
- Güremen, L. (2016). Amasya case in a research on the effect of user perception of housing and residential areas on satisfaction and preference behavior. *Technological Applied Sciences*, 11(2), 24-64.
- Henk de Haan. (2005). Social and material appropriation of neighborhood space: Collective space and resistance in a Dutch urban community.
- Karasu, M. (2021). *The relationship between temporal experience and spatial personalization. PhD thesis, Istanbul University Institute of Social Sciences, Istanbul. Access Address (12.12.2019): <https://tez.yok.gov.tr/UlusalTezMerkezi/giris.jsp>*
- Kärrholm, M. (2005). Territorial complexity in public places: A study of territorial production at three squares in Lund. *Nordisk Arkitekturforskning*, 99-114.
- Kärrholm, M. (2007). A conceptual discussion of territoriality, materiality, and the everyday life of public space. *Space and Culture*, 10(4), 437-453.
- Korosec-Serfaty, P. (1976). In P. Korosec-Serfaty (Ed.), *Proceedings of the 3rd International Architectural Psychology Conference*. Strasbourg, France: Louis Pasteur University.

- Korosec-Serfaty, P. (1985). Experience and use of the dwelling. In I. Altman & C. M. Werner (Eds.), *Home environments* (pp. 65-87). New York, US: Plenum Press.
- Korur, S., Sayın, S., Oğuzalp, E., & Korkmaz, S. (2006). The impact of facade interventions based on user requirements on the quality of the physical environment in housing. *Selçuk University Journal of Engineering, Science and Technology*, 21(3), 177-190.
- Kyle, G., & Chick, G. (2009). The social construction of a sense of place. *Leisure Sciences*, 29(3), 209-225.
- Lara-Hernandez, J. A. (2020). General introduction. In A. Melis, J. A. Lara-Hernandez, & J. Thompson (Eds.), *Temporary appropriation in cities: Human spatialization in public spaces and community resilience* (pp. 1-9). Cham, Switzerland: Springer.
- Lefebvre, H. (1995). *The production of space* (D. Nicholson Smith, Trans.). Oxford: Blackwell.
- Marx, K. (1893/1994). Selected writings (L. H. Simon, Ed.). *Indianapolis, IN, US: Hackett Publishing*.
- Marx, K. (2013). *1844 manuscripts* (M. Belge, Trans.). Istanbul: Birikim Publications.
- Maslow, A. H. (1943). A theory of human motivation.
- Mehta, V. (2013). The street: A quintessential social public space. Florence Production Ltd, Stoodleigh, Devon, UK.
- Modh, B. (1998). Appropriating everyday space—An important aspect in the development of city culture. In L. Nyström (Ed.), *City & culture: Urban sustainability and cultural processes* (pp. 13-17). Stockholm, Sweden.
- Morval, J., & Judge, P. (2000). Motivation at work and space appropriation. In B. Gangloff (Ed.), *Professional competencies: Descriptive, measurement, and development* (pp. 127-134). Paris, France: L'Harmattan.
- Moser, G., Ratiu, E., & Fleury-Bahi, G. (2002). Appropriation and interpersonal relationships: From dwelling to city through the neighborhood. *Environment and Behavior*, 34(1), 122-136.
- Noorian, T. (2009). *Personalization of space in office environments. Master's thesis, Eastern Mediterranean University, September 2009, Gazimağusa, North Cyprus*.
- Özdemir, İ. (1994). *The concept of spatial organization in evaluating architectural space: Living spaces in housing. PhD thesis, KTU Institute of Science, Trabzon. Access Address (12.12.2019): <https://tez.yok.gov.tr/UlusalTezMerkezi/giris.jsp>*
- Özkan, D. G. (2017). *The effects of campus open space environmental characteristics on place attachment: KTU Kanuni Campus. PhD thesis, Karadeniz Technical University Institute of Science, Trabzon. Access Address (12.12.2019): <https://tez.yok.gov.tr/UlusalTezMerkezi/giris.jsp>*
- Perker, S. Z., & Akıncıtürk, N. (2011). Physical changes in traditional houses: Three case studies in Bursa. *Uludağ University Journal of Engineering and Architecture Faculty*, 16(1).
- Pol, E. (2002). The theoretical background of the city-identity sustainability network. *Environment and Behavior*, 34(1), 8-25.
- Rioux, L. (2004). Types of university sites and space appropriation. *Canadian Psychology*, 45(1), 103-110.
- Rioux, L., Scrima, F., & Werner, C. M. (2017). Space appropriation and place attachment: University students create places. *Journal of Environmental Psychology*, 50, 60-68.
- Seamon, D. (1980). Body-subject, time-space routines, and place-ballets. In *The human experience of space and place* (pp. 148-165).
- Şahiner Tufan, A. (2019). *Examining personalization forms in nursing homes: The Trabzon example. Master's thesis, Karadeniz Technical University Institute of Science, Trabzon*.

Tarakçı, B.İ. (2023). Personel Archive.

Tarakçı, B.İ. (2024). Personel Archive.

Tuan, Y. F. (1977). *Space and place: The perspective of experience*. Minneapolis, MN, US: University of Minnesota.

Turgut, H. (2014). User experiences in temporary housing areas after disasters. *Megaron*, 9(1), 23-40.

Twigger, C. L., & Uzzell, D. L. (1996). Place and identity processes. *Journal of Environmental Psychology*, 16, 205-220.

Uzunoğlu, K., & Özer, H. (2014). Evaluation of mass housing in the pre-design phase. *Megaron*, 9(3), 167-189.

Vidal, T., Valera, S., & Peró, M. (2010). Place attachment, place identity and residential mobility in undergraduate students. *Psycology*, 1(3), 353-369.

Wells, M. M. (2000). Office clutter or meaningful personal displays: The role of office personalization in employee and organizational well-being. *Journal of Environmental Psychology*, 20, 239-255.

Wineman, J., & Peponis, J. (2010). Constructing spatial meaning: Spatial affordances in museum design. *Environment and Behavior*, 42(1), 86-109.

