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Fig. 1 Location and photographs of the Nicosia Municipal Arts Centre in the walled city of Nicosia.

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Industrial Heritage Buildings in Cyprus
Spatial Experience of the Nicosia Municipal Arts Centre

adaptive reuse
Cyprus
industrial heritage
Nicosia Municipal Arts Centre
spatial experience

This study focuses on the Nicosia Municipal Arts Centre [NiMAC] in Nicosia, one of the prominent historical industrial buildings in Cyprus, which has been re-functionalized as an art centre. The overall goal of this study is to examine and clarify the human experience of the NiMAC building as part of one's lifeworld. The main argument of the research is that proposing an effective research design for examining how a person distinguishes the components of a re-used building is possible by human responses to architecture rather than focusing on the physical aesthetics of it. Hence, the purpose of the study is to make a multi-sensory analysis to grasp how a person develops an emotional attitude in the re-functioned space which can be the core assessment of the adaptive re-use purposes. In this context, this research basically explores the main research question which is about what spatial experiences the NiMAC building is offering to people after it is re-functioned when space is experienced in a multisensory approach. Methodologically, this research design is basically created by the hybrid use of first-person, existential, and hermeneutic tactics of the phenomenological approach.

INTRODUCTION

Historical buildings possess tangible and intangible qualities that link the past and the future. On the other hand, architecture assumes the role of reviving the historical buildings according to contemporary conditions. Functional changes also imply spatial changes. Hence, it is necessary to evaluate how users feel when they experience new designs that combine historical and contemporary textures. Each user may interpret the architect's existential experience and spatial reflections of selfdom differently. This is related to the fact that every user has different cultural values, experiences, knowledge, and memories. As Ludwig Wittgenstein stated in his article entitled "Culture and Value", both philosophical and architectural work interacts with self-image.[1]

Industrial heritage is important in terms of passing culture from the old to the new generations. It also helps to preserve and transfer traditional values (Golmakani, 2011: 28). With their magnificent chimneys, cooling tanks, and fuel units, they influence how the city is perceived. These buildings take people to the past and help them discover themselves and understand the old. The International Committee for the Conservation of the Industrial Heritage [TICCIH-1978] is the first foundation established for the conservation of industrial buildings. Industrial buildings differ from other buildings in terms of their architectural and structural characteristics, spatial organization, and functional properties. They are among the important types of structures that can be suitable for reuse.

Historical industrial buildings have a remarkable value throughout the world. When the island of Cyprus, which is the third-largest island in the Mediterranean, is examined, in addition to the industrial buildings which include transportation buildings, CMC mine, cement factory, textile factories, food processing factories such as tobacco, carob, wine, citrus, olive oil mills and warehouse, as well as furniture, plastics, metal-works, chemical, and pharmaceutical factories that are still in use or have been abandoned due to economic and political reasons, there are also some industrial structures that have been re-functionalized and they still serve their new functions. These buildings, whose construction started in the 1900s and were built until the 1980s, are generally located in coastal towns Famagusta, Limassol, and Larnaca.

The main interest of this research comprises the re-functioned industrial heritage buildings which have originally high ceilings, open plan typology, and mostly containing large-scale machinery under a single roof. These buildings are different from the other building categories such as health, educational, religious, or residential in terms of the structural systems and spatial organizations. Thus, it is potentially possible to assign a new function to the old industrial building without having any extremely negative effects of structural elements. In these regards, the scope of this study is predominantly limited to the industrial heritage buildings in Cyprus and specifically the Nicosia Municipal Arts Centre [NiMAC] building which researchers can access and analyze efficiently.

The number of the old industrial heritage buildings in Cyprus is quite high as seen in Table I and Table II which were created to specify the facts about the context. It is an indication of the significance of this study, so as an impact of it, this methodology can be

1 The interpretation of the environment and the object that is being viewed can differ significantly depending on the self-interpretation. In other words, people's perceptions may vary according to the things they observe (WITTGENSTEIN, 2002: 117).

2 Alberto Gomez (1994: 6) claimed that the political content of reality, the a priori of the world, which is the ultimate frame of reference for any truly meaningful architecture is hidden beneath, a thick layer of formal explanations. With a similar opinion, this phenomenological research is intended for collecting and interpreting data to understand the human aspects of the re-functioned structure ultimately as well as evaluating its physical characteristics. Thus, the question of how human behaviour and experiences define space as a lifeworld becomes the essential concentration of this inquiry while it seeks to comprehend the spatial experiences in NiMAC building that are adaptively reused with the help of all the senses.

repeated for another building after NiMAC. Table I has been prepared to provide information on abandoned industrial buildings across the island of Cyprus. These buildings constitute an important potential in terms of being re-used in the urban fabric where they are located. They are capable of responding to the development of the region and the usage needs of the people of the region by refunctioning. For these reasons, these structures are selected and shown in Table I. Table II shows the structures in the island of Cyprus that have been re-functionalized and made available for the benefit of the society and have also made positive contributions to the economic and social development of the region. These structures in Table II are expected to be examples of structures that will be re-functional in the future. Another reason for choosing the structures in these tables is that they are similar to the NiMAC building analyzed in the study context in terms of spatial and building size.

Usually, in the architectural design process, tangible values such as form, volume, size, height, colour, material type, structural system, construction method, and function are mostly considered; however, intangible values such as the emotions these qualities evoke in human beings are overlooked.

In order for an architectural design to be meaningful, not only tangible values but also intangible values should be considered, and the forms should be designed based on the senses.[2] The primary question of the study is "What spatial experiences do historical industrial NiMAC building offer to first-person after they have been re-functioned?" In addition to this main question, the study seeks an answer to the following questions: "What are the consequences of experiencing the space with the senses?" and "Do we obtain different conclusions when space is experienced in a multisensory approach?"

The purpose of the study is to document the historical industrial NiMAC building and to analyze the structural and spatial transformations. Furthermore, this study is stressing both the objective and the emotional perceptions of human beings through designs grounded in concrete experience. In normal daily life, people are usually involved in a position that they undertake daily life experiences as if they are inherent, and this is called the "natural attitude". The world of "natural attitude" is called as "lifeworld". Lifeworld, in another word, the world of lived experience, is inhabited by humans as conscious beings and incorporating the way in which phenomenon becomes a conscious experience, that is NiMAC building for this study. The prominent goal is to describe a lived experience, rather than to explain or quantify it in any way.

Concisely, the study adopts a phenomenological research design to investigate the tangible and intangible qualities of space. The quantitative techniques are used for the data presentation of tangible qualities such as plan layouts, spatial organization, façade

Table I The examples of the abandoned industrial heritage buildings in Cyprus

THE ABANDONED INDUSTRIAL HERITAGE BUILDINGS IN CYPRUS

1. The Sanayi Holding Turk-Teks Factory, Nicosia

2. The Alba Textile Factory, Nicosia

3. The Tek-Dok Polystyrene Foam Factory, Nicosia

4. The Old Sock Factory, Famagusta

5. The Vialco Washing Powder Factory, Larnaca

6. The Cleaning Products Factory, Famagusta

7. The Ece Flour Factory, Famagusta

8. The Othello Ice-Cream Factory, Famagusta

TABLE II THE EXAMPLES OF THE ADAPTIVE REUSE HISTORIC INDUSTRIAL BUILDINGS IN CYPRUS

THE ADAPTIVE REUSE HISTORIC INDUSTRIAL BUILDINGS IN CYPRUS

1. The Architecture Research Centre (Old Shoe Factory), Nicosia

2. The Centre of Visual Arts & Research (Old Flourmill), Nicosia

3. The Nicosia Municipal Arts Centre (Old Power Station), Nicosia

4. The Pharos Arts Foundation (Old Shoe Factory), Nicosia

5. The Bibliotheque Cafe (Old Carpenter's Workshop), Nicosia

6. The Private Ethnographic Museum, Nicosia

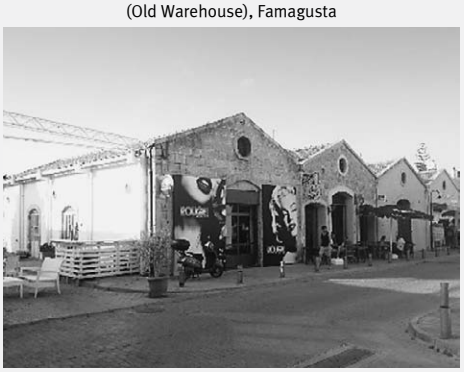
7. The Larnaca Municipal Cultural Centre (Old Warehouse), Larnaca

8. The Municipal Cultural Centre Panos Solomonides, Limassol

9. The Lanitis Carob Mill Museum (Old Carob Factory), Limassol

10. The TEPAK Mechanical Engineering Labs (Old Warehouse), Limassol

11. The Social and Commercial Centre (Old Warehouse), Famagusta



12. The Nicosia Parliament Building (British American Tobacco Factory), Nicosia

characteristics, the preparation of the materials lists, and the tabulation of the data obtained whereas the qualitative technique was used mainly to interpret the lived or multisensory experiences. Also, to get a vision of the future of industrial construction transformations is an expedition of the study.

In a methodical way, this study is conducted based on firstly Seamon's "first-person" experiences of individual who is an architect as well, secondly, the interpretations made by co-researchers in an existential way as von Eckartsberg suggested, and thirdly the archetypal dimension, which is related to individuals' spontaneous and unconscious reactions as Thiis Evensen practiced.

Literature review

Considering both the theoretical and the practical background of this research, current knowledge about historical heritage, industrial structures, phenomenology with its conceptions and methods in architecture, sense of a place, NiMAC building, and multi-sensorial experiences have been overviewed.

Historical buildings serve as a bridge that connects the social, cultural, economic, and architectural values of the past to the present. They play an important role in revealing the secrets of the cultural values of the past as well as ordinary and social-economic life. Adaptive reuse is the act of finding a new use for a building. Richard (1988: 47) described it as a "process by which structurally sound older buildings are developed for economically viable new uses". This economic approach creates a valuable concentration area for increasing the tangible and intangible values in today's world where added value is needed for any kind of product, service, and space.[3]

Unlike newly constructed buildings, historical buildings that are adaptively reused evoke different feelings. In other words, historical buildings incorporate a feeling of liveliness and real-life experiences. When entering a historical space, one may feel the smell of humidity on the old walls and observe the traditional construction materials. This evokes the memories of the past and the person begins to contemplate and dream about the real-life experiences that occurred in this place. In fact, historical buildings constitute the silent screams from the past. The three theorists who have important influences in the field of phenomenology in architecture, Peter Zumthor, Juhani Pallasmaa, and philosopher Maurice Merleau-Ponty dealt with these experiences.[4] Also, Thiis Evensen who applied the theory of phenomenology to architectural analysis also has a significant encounter to interpret the experienced qualities of architecture.

While our body may be in the present, our mind may live in the past. Juhani Pallasmaa explains this as follows: "Architecture connects us with the dead; through buildings, we are able to imagine the bustle of the medieval street, and picture a solemn procession approaching the cathedral" (Pallasma, 2005: 52). Zumthor, in *Thinking Architecture*, explains: "I frequently find myself sinking into old, half-forgotten memories" (Zumthor, 1998: 10). In his work, Thiis-Evensen acknowledges that architectural form and space both presuppose and contribute to various shared existential qualities insideness-outsideness, gravity-levity, coldness-warmth, and so forth – that mark the foundation of architecture as human beings experience it (Seamon, 1991: 5). Experiencing a space in a multisensory way may be explained as the perception and interpretation of it by using all five basic senses of sight, hearing, smelling, touching, and tasting. Juhani Pallasmaa adds the skeleton and muscles to the five senses for experiencing a space (Holl et al., 2006: 30).

People perceive the size, material, colour, and height of space by seeing with their eyes, while they perceive the voices, noises, or silences by hearing with the ears. They record the good or bad smells of live or lifeless objects and building materials by smelling the space. The scents integrate the people with

3 (TICCIH-1978), the International Committee for the Conservation of the Industrial Heritage (Nizhny Tagil Charter for the Industrial Heritage, 2003) defines industrial heritage as follows: "Industrial heritage consists of the remains of industrial culture which are of historical, technological, social, architectural or scientific value. These remains consist of buildings and machinery, workshops, mills and factories, mines and sites for processing and refining, warehouses and stores, places where energy is generated, transmitted, and used, transport and all its infrastructure, as well as places used for social activities related to the industry such as housing, religious worship or education".

4 Zumthor (1998: 10) approaches architecture and experience primarily through the first-hand exploration, using his own memory and encounters. Pallasmaa (2005: 32) declares that contemporary architecture is not responding to human existential questions. In contrast to Zumthor, Pallasmaa's approach combines existential and hermeneutic aspects: "The current over-emphasis on the intellectual and conceptual dimensions of architecture contributes to the disappearance of its physical, sensual and embodied essence. Contemporary architecture is mapping the possible marginal territories of the art than responding to human existential questions." (Pallasmaa, 2005: 32). Likewise, Maurice Merleau-Ponty (2010) believes that there is an ongoing dialogue between one's lived body and the world which it perceives, and the human body is the center of the experiential world. Merleau-Ponty's methodology is also a combination of existential and hermeneutic as similar to Juhanni Pallasmaa. As cited in Pallasmaa (2005: 40) Merleau-Ponty claims that "our own body keeps the visible spectacle constantly alive, it breathes life into it and sustains it inwardly, and with it forms a system". Consistently, Pallasmaa (1996: 450) writes "The quality of architecture does not lie in the sense of reality that it expresses, but quite in reverse, in its capacity for awaking our imagination".

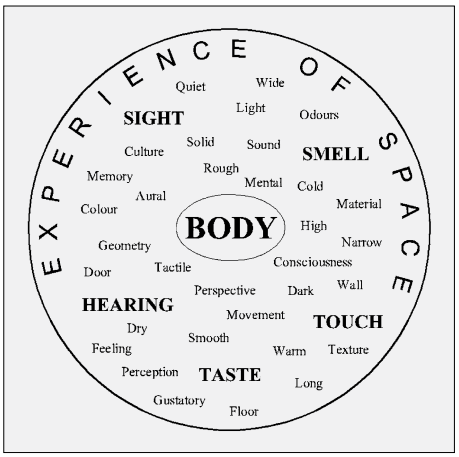


FIG. 2 GRAPHICAL EXPLANATION OF THE HUMAN EXPERIENCE IN SPACE

the space in which they are located.[5] As Bachelard writes, "memory and imagination remain associated" (Bachelard, 1969: 13).[6] Eyes are the most fundamental sense organ in the perception of space; people's sense of touch is as prominent as sight. For example, the eyes may understand whether a stone wall is rough, steel is cold and heavy or wood is hotter. People see the depth, the smoothness, the softness, and the hardness of objects. These situations reveal that sight constitutes an extension of the sense of touch. The vision reveals what the touch already knows. Or, people first smell the fire, then see where it is located when they check with our eyes. This again proves that the sense of sight constitutes an extension of the sense of touch. When it seems complicated to perceive space with the sense of taste, the fundamental concept here is the interaction between the senses of smell, touch, and taste. The sense of taste may be combined with meanings that are more metaphorical.

Each space has its own spirit. Therefore, analyzing a space with regard to its physical, spatial, and structural specifications is not enough to experience the building. The spirit of the building must be felt, and the building must be experienced in harmony with human senses and feelings.[7]

In the present study, as claimed, a sensorial and phenomenological approach which refers to "living by feeling" was used in experiencing the sense of space in the buildings. "Living by feeling" can be described as individuals perceive, experience, and interpret an event, space, or object by feelings. The phenomenological method involves the understanding and perception of an event or a place with senses, beyond existing and widely known facts and perceptions. "Awareness of space" or "consciousnesses of space" are among the important definitions of the phenomenological perspective. Awareness of space can occur in many different ways, including perception, memory, retention and pretention, signification, etc. (Rollinger, 1999: 130).

Phenomenology is the science of describing the individual experience, one's way of "being-in-the-world" (Cerbone, 2008: 31). "Phenomenology is not only a description, but it is also an interpretive process in which the researcher makes an interpretation of the meaning of the lived experiences" (Creswell, 2013: 80). Phenomenologically, the place can be defined as any environmental locus that gathers together human experiences, actions, and meanings spatially and temporally (Seamon, 2013: 150).

Edward Relph explains that phenomenology is a way of thinking that enables us to see what is "right before our eyes, yet somehow obscured" (Relph, 1976: 9).[8] To move toward understanding, such terms must be lived and entered, not merely classified or described (Seamon and Mugerauer, 2000: 209).

Briefly, the spirit of space is interpreted from a phenomenological perspective with the help of senses, perceptions, instinctions, subconscious, and experiences. The architecture enables people to find their place in the world for being for themselves. As Christian Norberg-Schulz puts it, "human identity presupposes the identity of place... the basic act of architecture is therefore to understand the vocation of the place" (Schulz, 1991: 22-23). The diverse and sometimes conflicting responses of people to the environment emphasize that the importance of the sense of place has more to do with the connections between the physical environment and the people's activities and memories than physical dimensions alone (Sancar and Macari, as cited in: Proctor, Sancar and Alanen, 1990: 85). The concept of genius loci has originated from civilization.[9] Today, the notion of "genius loci" usually refers to a location's characteristic atmosphere, or a "spirit of space", rather than necessarily a guardian spirit (Kurt, 2009: 2).

By their valuable methodological contribution to the phenomenological research, Seamon and von Eckartsberg created approaches that can be adopted describing architectural space in order to explore the sense of a place through individual experiences.

RESEARCH DESIGN AND METHODOLOGY

While both qualitative and quantitative techniques were used to collect data, this study

5 Even if the eyes were closed, one could guess his or her location based on the smell that is recorded in the memory. A particular smell makes people unknowingly re-enter a space completely forgotten by the retinal memory; the nostrils awaken a forgotten image, and people enticed to enter a vivid daydream. The nose makes the eyes remember.

6 Through the senses, people record their experiences in their memories. Therefore, they may perceive a space or a person again with the images that their senses recorded. Edward S. Casey, in his work on the place, memory, and imagination, explains the connection between the memory and the body's perception by saying, "The body is also part of our system of memory. Body memory is the natural center of any sensitive account of remembering." (CASEY, 2000: 148).

7 German philosopher Martin Heidegger adopts an integrative approach in understanding the human-place relationship. He defines people's perceptions of a building only as a "construction" and explains it as their "being-in-the-world" condition (HEIDEGGER, 1962). Heidegger claims that space must be understood before being described.

8 Relph argues that space is not a void or an isometric plane or a kind of container that holds places. According to him, the interpretation of space may vary based on the individual's own experiences. Although he states that there are countless types and intensities of spatial experience, he delineates a heuristic structure grounded in "a continuum that has direct experience at one extreme and abstract thought at the other..." (RELPH, 1976: 9). On the one

was designed as phenomenological research to investigate the tangible and intangible qualities of space. The experienced case is one of the historical industrial buildings that have been adaptively reused in Cyprus.[10] In this manner, the purpose of this phenomenological case study concerning a re-used industrial building is to illuminate the distinct characteristics of the reconstructed space and to identify the space based on how it is perceived in daily life. Eventually, this study aimed to comprehend the effective parameters for exploring successful design attitudes concerning first-person experiences in a refunctionalized industrial building.

Rolf von Eckartsberg (1998) presents two general methodologies in the phenomenological research approach: existential and hermeneutic. Moreover, David Seamon (2002) added a third methodology: the first-person, where the examination depends on the researcher's personal experience of the phenomenon. In line with their approaches, architect Thiis-Evensen (1989) associates the private mode of experience with personal taste and preferences in relation to a particular building or architectural style, and he calls this as the mode the archetypal dimension. Thus, this inquiry uses various techniques related to these approaches in data collection, analysis, and interpretation processes to evaluate the human experiences of the space being studied.

These theorists were selected because the phenomenological research method they use matches the research and study method of this inquiry. Seamon's studies regarding the person-environment relationship (Seamon, 1982; Bott, 2000: 18) are utilized in the procedure of this research. Similarly, von Eckartsberg's empirical existential-phenomenological approach which has a structural orientation that aims to reveal the essential general meaning structure of a given phenomenon in answer to the implicit research-guiding question of "what is it, essentially?" (von Eckartsberg, 1998a: 21) is employed for the goal of finding the essences described. Likewise, Thiis-Evensen's interpretive approach for hermeneutics of the language of architecture is conveniently developed for describing the individual experiences in this research.[11] Figure 1 shows human experience in the space with all senses and memory.

The first-person experiences are accomplished by participants defined as participant/co-researcher for this study throughout the research both for defining the physical characteristics of the space as implied in previously stated Relph's approach and for realizing the multi-sensory perception of the space. These experiences create a base for the semi-structured interviews. In this procedure, firstly the quantitative techniques such as collecting historical information from the published sources, documenting the space by photos, classifying and diagramming the tangible qualities of place are conducted in the data collection process. Then, adopting Evensen's approach, individual perceptions are communicated by qualitative research techniques which refer to the individual observations and the lived experiences on the research subject. The data collection procedure involves interviewing individuals by

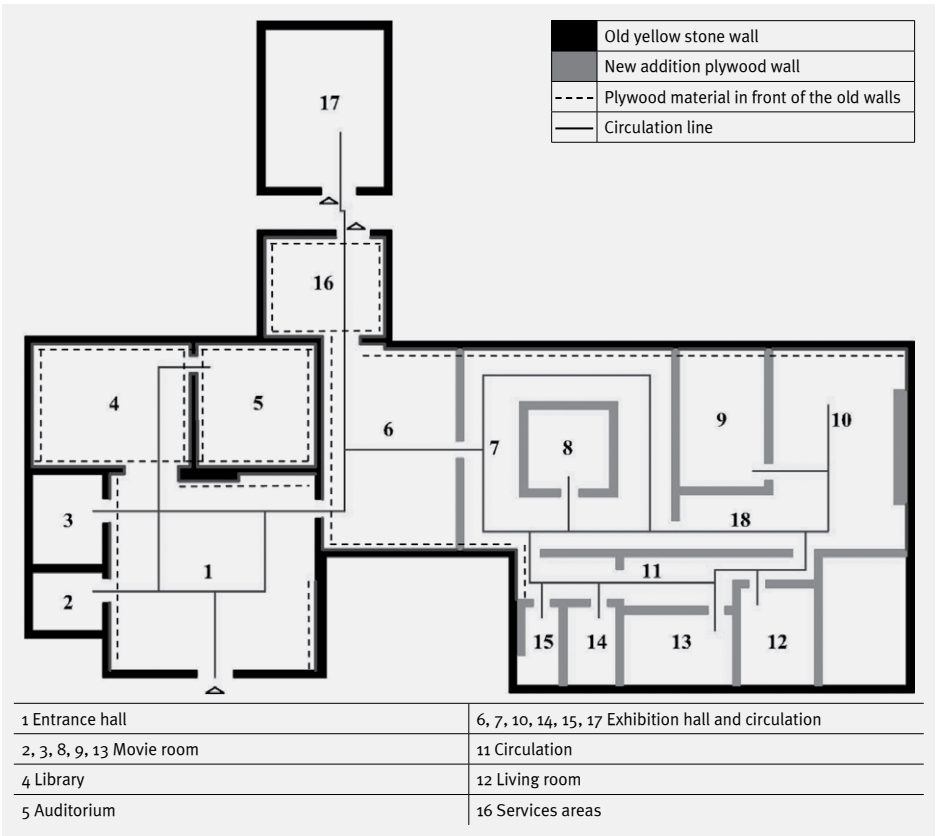
Fig. 3 Old photos of the Nicosia Municipal Arts Centre before renovation

hand, he identifies modes of spatial experience that are instinctive, bodily, and immediate, what he calls pragmatic space, perceptual space, and existential space, or example. On the other hand, he identifies modes of spatial experience that are more cerebral, ideal, and intangible, including planning space, cognitive space, and abstract space (Relph, 1976: 44).

9 In Roman mythology, a "genius loci" was the protective spirit of a place, which was frequently described as a snake. According to the ancient Roman belief, every "independent" being has its genius or guardian spirit. This spirit gives life to people and places, accompanies them from birth to death, and determines their character or essence (Schulz, 1979: 45).

10 Thus, the main purpose of this study is to clarify the fundamental meaning of experiencing a renovated building's space. From the architectural point of view, the phenomenological inquiry for this case originated from the assumption that perception is directed toward the "reconstructed environment", which is linked to one's consciousness.

11 Thomas Thiis-Evensen aims to understand "the universality of architectural expression". His interpretive means is what he calls architectural archetypes "the most basic elements of architecture," which he identifies as floors, walls, and roofs. He proposes that the lived dimensions of a building can be clarified phenomenologically through what he calls the three existential expressions of architecture: motion, weight, and substance (Thiis-Evensen, 1989: 8-21).



1 Entrance hall	6, 7, 10, 14, 15, 17 Exhibition hall and circulation
2, 3, 8, 9, 13 Movie room	11 Circulation
4 Library	12 Living room
5 Auditorium	16 Services areas

FIG. 4 SPATIAL ORGANIZATIONS AND CIRCULATIONS DIAGRAM OF THE NIMAC (ABOVE AND RIGHT)

managing the semi-structured interview technique. The interviewees are architects who have never been in the NiMAC building before. Including one of the researchers, there are 7 interviewees who experienced the NiMAC building as a phenomenon.[12] Furthermore, emotionally experienced intangible values by the participant/co-researchers are narrated in text, afterward, the interviews are done. The researchers have abstracted these narrations using qualitative analysis techniques such as bracketing and explication, for the hermeneutic revisiting of data as von Eckartsberg suggested in his existential-phenomenological research.[13]

Phenomenology in architecture is based on the experience of building materials and their sensory properties. It can be understood as an aspect of philosophy related to research into the experience of built space, and as shorthand for architectural phenomenology or a historical architectural movement. A sensorial and phenomenological approach was used during the realization of the spatial experiences of selected buildings throughout the study. In this context, the study was conducted as follows:

Literature review: Data investigation related to the subject of the study is done and the buildings to be included in the study are defined.[14]

Field research and selection of buildings: Firstly, industrial zones located throughout Cyprus were explored and field trips were organized, which enabled industrial buildings with historical and architectural heritage value to be listed (Table I and II). The buildings were photographed and grouped by region. By documenting these buildings, the study aims to provide an insight for future studies. The selected historical industrial NiMAC building will be examined in detail within the scope of the study.

Building descriptions and findings (Case Study): The process is designed for experiencing the selected building as a case study, in line with the hybrid use of various tactics of the phenomenological approach. The coding of this research includes personal bracketing, significant statements, meaning units, textural description, and structural description to comprehend the essence of the phenomenon.

The researchers collected data to interpret the perceived qualities of space in the following phases:

a) The static physical setting of the selected building is documented in a quantitative way, and the components are stated to go in-depth analysis.

b) Participant/co-researchers perceived the space as a first-person. Before experiencing spaces with the sensorial approach, the studies of architectural theorists on spatial experiences have been examined. Observations and spatial experiences are done individually.

c) To develop an understanding of the space the Thiis Evensen's hermeneutic approach is followed. This approach, advocating that space is experienced using all the senses, investigates the tangible effects of the buildings on the perceptions of the first person.

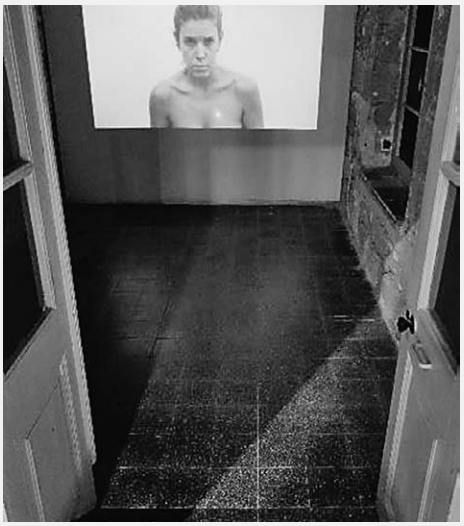
d) Lived experiences are narrated in-text in an experiential manner. Then the interviews are done.

12 In the phenomenological research "a heterogeneous group is identified that may vary in size from 3 to 4 individuals to 10 to 15". (CRESWELL, 2013: 78)

13 Existential Phenomenological research includes: 1) Problem and Question Formulation / The Phenomenon, 2) Data-Generating Situation / Protocol Life-Text, 3) Data Analysis / Explication and Interpretation, 4) The presentation of findings / Presenting results. (VON ECKARTSBERG, 1998a: 22-23)

14 In the literature research, oral information as well as written, printed, and visual documents such as books, articles, theses, reports, journals, newspapers, maps, drawings, and photographs were researched. The documents were collected from university libraries, national and personal archives, relevant municipalities, the City Planning and Land Registry Office, architectural offices, and internet sources. The qualitative research method was used to investigate the industrial buildings that have been adaptively reused in Cyprus, the definition of industrial heritage, conservation charters, the spirit of space, sensorial approach, multisensory architecture, spatial experience, and architectural theorists.


Space 1


Space 2


Space 3


Space 4


Space 5


Space 6

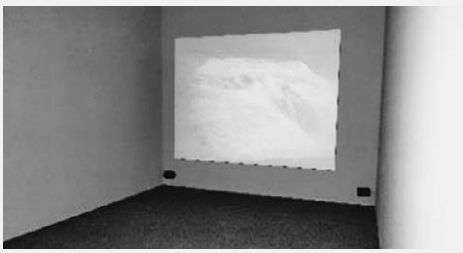

Space 7


Space 8


Space 10


Space 11


Space 12

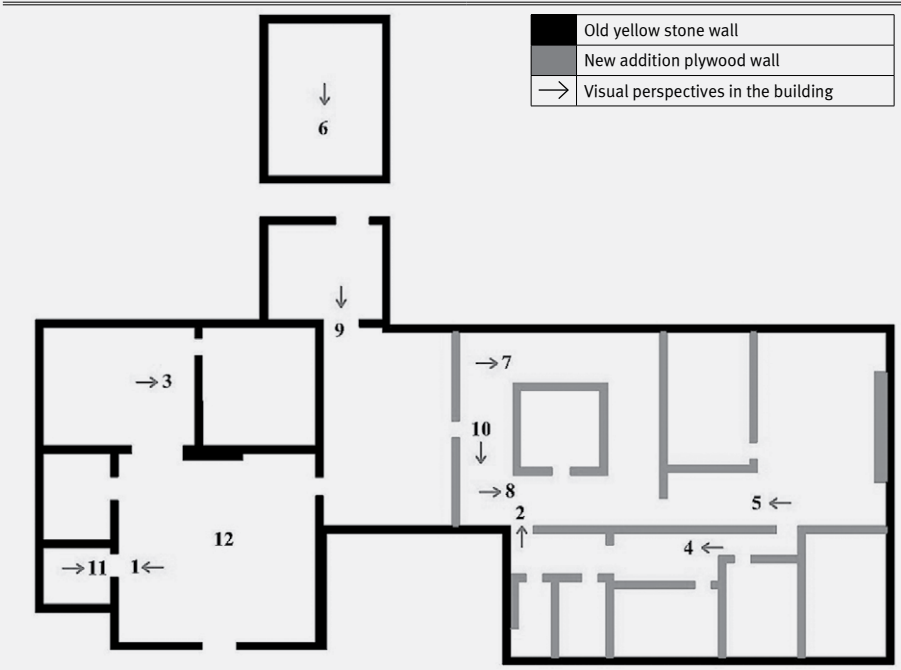

Space 13


Space 16

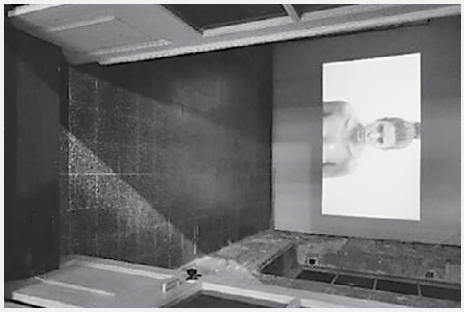

Space 17


Space 18

VISUAL EXPERIENCE (SIGHT-EYES)



1. Projected exhibition room: small, peaceful, dim



9. Arched passage: intimate, long, spacious

10. Exhibition area: coloured, passages, high walls

5. Exhibition area: high, big, old-new, artificial-natural, minimal

11. Complex: bright, neutral, old materials

12. Ceiling of the entrance hall: high, rusty, historic

Results and Discussion: The co-researchers interpreted the acquired data by using Eckartberg's methodological tactics. Descriptive protocols, explication, bracketing techniques are practiced to get the meaning of the essences in the space.

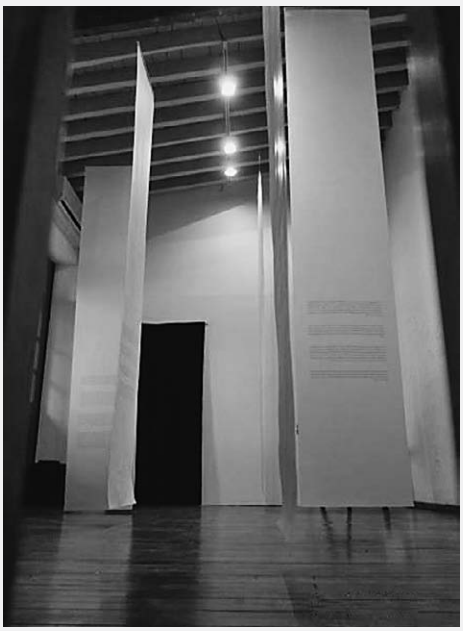
Conclusion: Presentation of closing reflections about the selected case by evaluating the lived experiences from the perspective of the co-researchers.This section of the study, constituting the core of the work, is based on spatial experiences. The experiences felt and perceived by the senses of the first person in the space have presented and described from a phenomenological perspective in Chapter: Case Study. For the purposes of the field study, the location of the building in the

VISUAL EXPERIENCE (SIGHT-EYES)

2. Entrance hall's roof:
high, spacious, historic

3. View from the library to auditorium:
old-new, high ceiling

4. Long, narrow corridor:
bright, spacious



6. View from two storied building:
hot, small, loving

7. Exhibition area:
high ceiling, coloured wall painting, spacious

8. Exhibition area:
high ceiling, corridors, spacious, passages

city texture was firstly mapped (Fig. 2). The historical background of the building was researched, a planning scheme of the building was created, and a number was then assigned to the building (Fig. 4). In the field study, the building was measured by analytical methods, sketches were drawn, and diagrams and tables were prepared. At the same time, spatial organizations and circulations were observed, and an analysis of the old-new combination was conducted. Comparative methods were implemented to compare the old and new plan characteristics of the buildings (Fig. 4). Old yellow stone walls have been represented of the original plan of the NiMAC. Furthermore, the architectural and structural characteristics of the building were analyzed.

Fig. 5 Visual experience of space with a sensorial approach

FIG. 6 OLFACTORY EXPERIENCE OF SPACE WITH A SENSORIAL APPROACH

CASE STUDY: THE NICOSIA MUNICIPAL ARTS CENTRE [NiMAC], NICOSIA

Nicosia Municipal Arts Centre [NiMAC] is located in the walled city of Nicosia on Pentadaktylou Street (Fig. 2). The old electricity power station building is one of the finest examples of industrial architecture in Cyprus (Fig. 3). It was built in the late 1920s and corresponds to the principles of the Bauhaus movement. This building was the first Power Generating Station in Nicosia. The intention of the architects was to restore the building to its original state with very few alterations as well as to meet all the needs of a contemporary cultural centre. The centre covers ap-

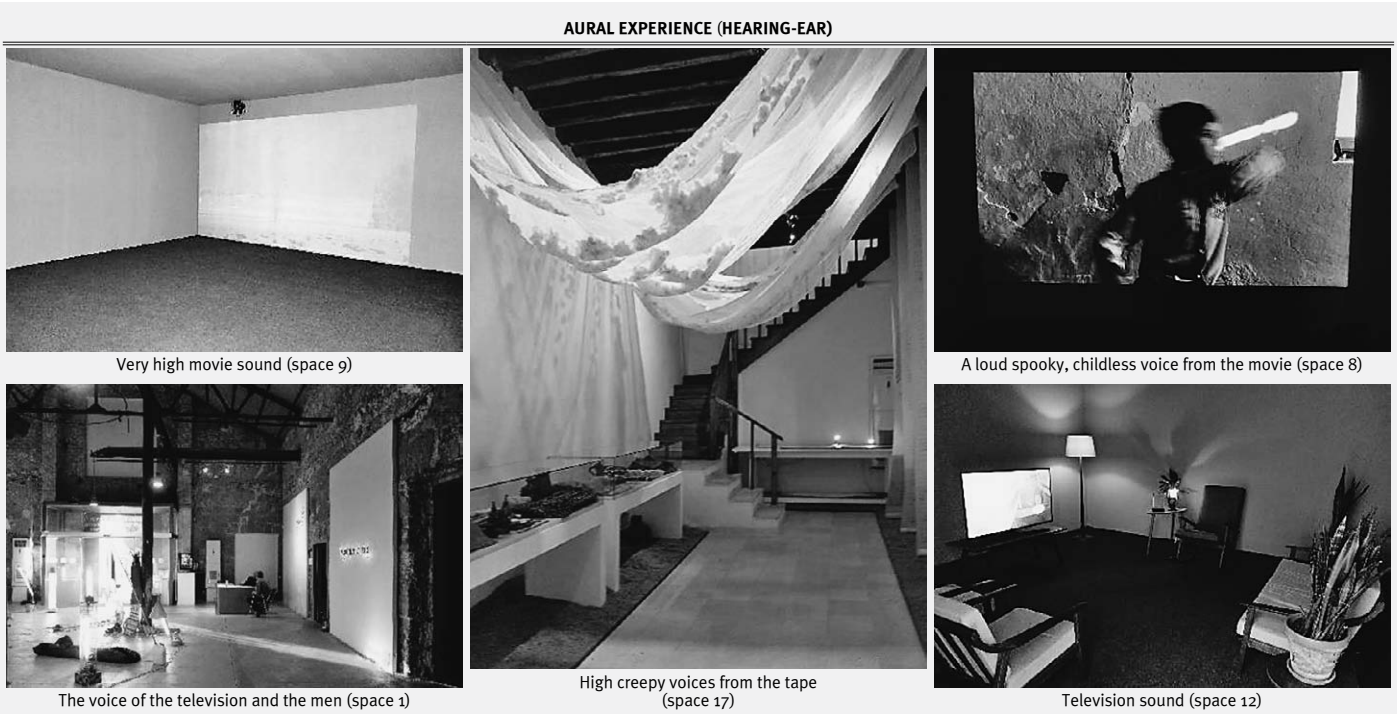


Fig. 7 Aural experience of space with a sensorial approach

proximately 3,000 m², and it is the first in a series of projects implemented by the Municipality to upgrade and regenerate this part of old Nicosia (Nicosia Municipality – The Nicosia Municipal Arts Centre, 2021). Its architectural restoration was awarded the Europe Nostra Award in 1994. The centre, which is one of its kind in Cyprus, aims to promote contemporary creation at the highest level. Its policy is to organize important and prestigious exhibitions, thematic, retrospective events, or others, from home and abroad (NiMAC – Nicosia Municipal Arts Centre, 2021).

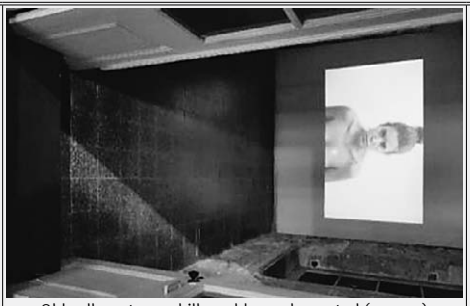
The physical settings of the NiMAC building: Architectural and structural characteristics of the building are quantitatively examined and diagrammatized in Fig. 4. The spatial organization, the plan layout, functions of the spaces, circulation network, façade characteristics, building elements, characteristics of the doors, windows, and structural systems, etc. are described both in diagrams and in-text (Fig. 4). The single-storey NiMAC building, which has an open plan typology in its original use, is seen as a divided space in today's use. The walls of the buildings were built using a load-bearing construction system with traditional yellow stone materials. The height of the ceiling in the main building is approximately 10 meters. The roof is a gable roof, which is covered with an aluminium cover material consisting of cast iron truss bearings. There are rectangular glass windows that are positioned horizontally and vertically on the facades of the building, which protects the original texture. On the east side, there is a rounded roof window. Since plywood partition wall panels have been used in front of the existing stonewalls inside the building, the lights reflected from these windows are not experienced within the space. On the drawing in Fig. 4, it is possible to observe the original bearing walls as well as the partition walls that were added later. The places are numbered and photographed.

Experiences of the space as a first-person: Spaces were experienced by individual observations before experiencing the building in a multisensory way. As mentioned in the previous sections, the building was first experienced without using all senses, sight, touch, smell, and hearing (Fig. 4). The participant / co-researchers visit the building very rapidly without stopping at any point. They only see their front to walk. Their ears and noses were covered. They haven't touched anywhere; they haven't tasted anything.

This research accepts the researchers as participants of the research as existential phenomenology stated. Therefore, together with one of the researchers, participant/co-researchers individually experience the space and describe this experience in a hermeneutic text. Afterward, the researchers coded and explicated the text in a qualitative way for the process of phenomenological reduction. Then both researchers' data are compared,

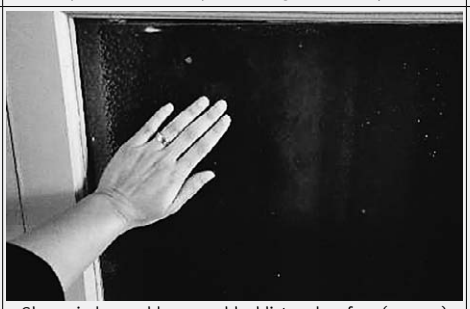
TACTILE EXPERIENCE (TOUCH-SKIN)


Concrete floor: linear texture, cold, hard, artificial (space 1)


Old yellow stone: chilly, cold, rough, neutral (space 1)

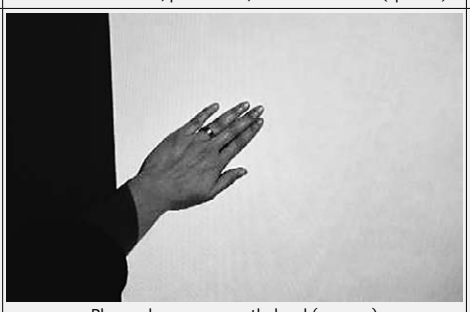

Rusted iron machine: hesitation, cold, industrial, static (space 1)

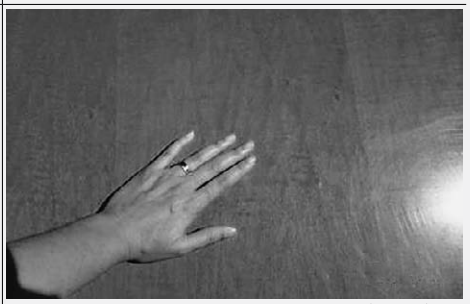

Gypsum plastered stone wall: rough, warm, natural (space 2)


Glass window: cold, permeable, blistered surface (space 2)

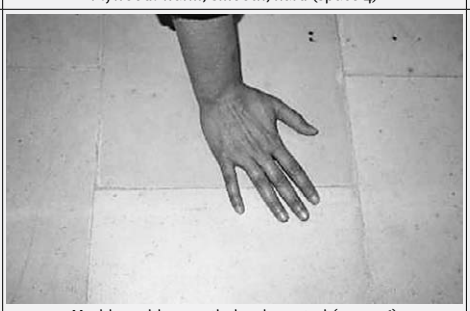

Windowsill: cold, rough (space 2)


Black curtain: soft, hot, dry, porous, light (space 3)


Plywood: warm, smooth, hard (space 4)


Wooden table: hot, smooth, slippery, neutral (space 4)


Iron chains: cold, heavy, industrial, static, porous (space 5)


Marble: cold, smooth, hard, neutral (space 6)


Plaster surface: rough, cold, artificial (space 9)


Carpet covering: hot, textured, artificial (space 9)


Tracing papers: hot, thin, transparent, light (space 17)


Wooden ladder scare: warm, smooth, natural, hard (space 17)

and the common points are outlined as seen in Table III.

Comprehending the space by Thiis Evensen's hermeneutic approach: Thomas Thiis-Evensen's main interests are the questions of how people experience architecture and whether people can develop a language to describe the architectural experience. He attempted to identify architectural archetypes as "the most basic elements of architecture". What spatial experiences the NiMAC building is offering to people after it is re-functioned when space is experienced in a multisensory approach, the key question of this research is alike to Thiis-Evensen's basic questions of "How does architecture convey meaning", "What is the building saying", "How do people experience the building", "What feelings does the building convey?" In this stage, the bracketing conducted without any preset judgment is used to collect data by individual experiences. The co-researchers rely on their intuition and imagination to uncover the essential qualities of the case. As to reveal the meaning of experiences explication of the collected data is also done. Figures 5, 6, 7 and 8 is related to the experience of space with a sensorial approach.

Lived experiences are narrated in-text in an experiential manner: At this stage, the co-researchers described their experiences in text format which includes decrypting the recordings and detailed field notes about their observation. These descriptive manuscripts are very comprehensive and quite long. Afterward, the co-researchers evaluate each other's transcript by using reduction, searching for essences, and focusing on the intentionality.

Results and discussion

The examination of the descriptive transcripts is summarized in Table IV. Regarding the data presented, the spaces described in the text are not sufficiently referring to all spaces in Figure 4. Likewise, it is significant that there is a qualitative and quantitative difference between the multi-sensory experience of the space and the previous lived experience by comparison between Table III and Table IV. Multi-sensory experiences made it possible to perceive many factors at the same time. Furthermore, perceiving space in a multi-sensory way allows feeling the space fully, to internalize and interpret the meaning it conveys. Thus, meanings from essences in the context of the lived experiences in spaces can be easily conceptualized.

Meanings derived from lived experience: By clarification of the collected data, the following results emerged as a description of the essence of the lived experiences of participant / co-researchers:

– Recognizing one's awareness of the spirit of space (in all spaces).

– Consciousness of internal meaning of the building components (in all spaces).

– Being in many different moods in different spaces (Space 1: thinking about the past time; Space 2: peaceful; Space 3: in a silent mood; Space 4: relaxing; Space 5: seriousness; Space 6 and 16: unrestfulness; Space 7: frustrating; Space 8, 9, 13 and 14: threatened; Space 15: relaxed; Space 17: mixed and opposite moods).

– Feeling of different emotions (Space 1: confidence; Space 2: feel safe; Space 3: fear and concern; Space 4: restful; Space 5: distressful; Space 6 and 16: spaciousness; Space 7: annoyed; Space 8, 9, 13 and 14: the feeling of being in an old movie theatre; Space 10: feeling of warmth; Space 11: enjoying; Space 12: a sense of a place attachment; Space 15: tranquillity; Space 17: various feelings at the same time such as warming, caring, exciting, coldness, creepy feeling, and so on).

– Experiencing the taste of historical values.

– Experiencing both alienation and a sense of belonging.

– Nostalgia.

– Feeling the significant effect of the building materials for developing an attachment to space.

– The broad perception of the space by multi-sensory examination.

As a closing reflection on these results, it can be stated as the designed phenomenological process enables to describe lived experience of re-functioned NiMAC building and it is possible to understand the human behaviour aspect of the design. As seen in Table III, which is about spatial experiences without using all senses, a perception not described very detailed way compared to Table IV which uses a multi-sensory approach. Although this re-

Table III Explication of the descriptive text of the spatial experiences without using all senses

Space	Spatial experiences without using all senses
The Nicosia Municipal Arts Centre	at the corner, grand in scale, the traces of its history, restored, reused, traditional materials, contemporary additions, original stone walls, plywood partition wall, natural materials cannot be seen from interior, various exhibition halls, a small library room
The entrance hall (to the south) – space 1	office desk, access to the other rooms, passage to exhibition halls and library, a small auditorium from the library
The small auditorium	small-sized, no difference in elevation, used for meetings
The entrance hall (to the north) – space 6	other exhibition halls, the courtyard, high walls, coloured with wall paintings, two dark rooms, short films and documentaries
End of the building – space 10	old maps, books, newspapers, displayed on the walls, a glass table, small door, a narrow corridor, small rooms, tables, armchairs, lamps, flowers, a television, a small living room, resting room, a building model is hanging from the ceiling, flowerpot is positioned below the model, access to the main exhibition hall, small door
The courtyard – space 17	access to the other building, door

Fig. 8 Tactile experience of space with a sensorial approach (left)

TABLE IV THE REPRESENTATION OF THE DESCRIPTIVE PROTOCOLS OF MULTI-SENSORY EXPERIENCES.

Space 1	– the smell of rust and dust – the voices of the men chatting, the sound of the television, and the recording sounds coming from the exhibition rooms – yellow stone walls: coldness, creeps, rough texture, think about the past time – iron machine mechanism: thought about the efforts of the workers in power station, bitter taste, great force, confidence – concrete slab: cold surface, linear texture – iron-trussed roof: preserved well the history, industrial structure
Space 2	– the smell of humidity, plaster, cement, and dust remembered old building – silence – low and flat ceiling, yellow stone walls: feel safe – dim lights: peaceful – small wood-frame, glass-winged window: it would lead to a magnificent view – concrete sill in front of the window was cracked in the middle; it was coloured in cement colour in half while the other half was green; it is like the junction point of the past and future; cracked in the middle, but side-by-side today...
Space 3	– the smell of humidity, plaster – silence – low-ceilinged, gloomy and cold room, darkness: fear, concern, sense of being followed
Space 4	– the smell of old books and lacquer, dust spreading from the carpet – light music: restful, relieve – gable roof ceiling, square wood rafter, enlighten with dim lights: relaxing – wooden work tables and bookshelves: warmth
Space 5	– frowsty, silence – darkness: seriousness – old sitting chairs: such as old courtroom, distressful – original rolls and chains: old power station
Space 6 and 16	– the smell of toilet from courtyard – mix music form record, courtyard, people: annoying – high ceiling: unrestful – bright room: spaciousness
Space 7	– the smell of paint – the voices of music, record, courtyard, people: annoying, mix – bright room: contemporary area, new period, moving with times – colourful paintings on the high walls: intriguing and attracted the users
Space 8, 9, 13 and 14	– the smell of dust, carpet and curtain: hard to breathe – record voice: annoying – dark movie rooms: threatening, feeling of being in an old movie theatre
Space 10	– the smell of old books, papers: felt like in an abandoned printing house – silence – bright room: freedom – old books: feel the warmth and the knowledge
Space 11	– fresh smell, silence – narrow, long corridor and artificial lighting: it seemed like users will overcome difficulties and eventually we will eventually begin to enjoy prosperity – iron sliding gate: cold – the smell of wall oil paintings: helped the user to commune with space
Space 12	– the smell of obsoleteness mixing with the smell of the flowers was fighting against time – old chairs and wooden tables: blissfulness, peaceful, like grandmother's adobe house – light music: restful, relieve
Space 15	– fresh smell, silence – small, spacious and luminous space: relaxing
Space 17	– the smell of barley and varnish: itchy and cold experience – high voice recordings: disturbing – duvet cotton on the wooden rafters in the ceiling: old villager lifestyle – marbles and wood staircase: felt the coldness and warmth – the transparent tracing papers, painted in cream and hung in the wood rafters: remembered architecture students – squeaking wooden floor: warm and caring experience to combine body with the history – In a nutshell, this building is intriguing, creepy, spacious, gloomy, exciting. In fact, it was a unique example of using the oppositions together. When it was dark and gloomy, it could be bright and spacious. Despite the cold and creepy areas, there was also a warm and caring spirit. While it was able to feel the obsoleteness and life experiences of the building, it could establish a connection with the contemporary life.

search is conducted only in one case, this approach can be adapted to describe the other buildings as well for involving human behaviour in architecture.

CONCLUSION

Historical buildings play an important role in preserving and sustaining both the experiences of the past and as well as cultural, social, and architectural values. In addition, re-functionalizing and repairing the existing building stocks for continued use contributes to the economic development of communities. Many religious, commercial, industrial, and educational buildings worldwide have been adaptively reused for the benefit of societies. In the 1900s in particular, many industrial structures were built across Cyprus, but due to political reasons, they lost their function and were abandoned over time. The re-functionalizing of industrial buildings, several of which have been included in the scope of this study, has allowed the societies to increase their awareness of conservation and the architectural values to survive until the present day.

The re-transformation of these high-roof and open-plan industrial structures which that contain major manufacturing machinery, with their new users, lead to both functional and spatial variables. While walking through the large manufacturing machinery in these factories, one cannot help contemplating among the walls redolent of with history, about the workers who worked there and, their experiences in the old days. Architectural space cannot be interpreted properly without multisensory perception. Reading the spirit of space by experiencing it, feeling, and interpreting it by touching, smelling, hearing, and seeing is quite important in terms of spatial perception. This study aims to draw attention to the presence and re-usability of existing historical industrial structures on the island of Cyprus and includes the results obtained from multi-sensory analysis of the Nicosia Municipal Arts Centre building.

Future re-functionalization studies may focus on how to interpret the spatial perceptions of architectural designs. It has been revealed once again with architectural observations and analysis that social development can be achieved by preserving the existing values and transferring these values to the future. As a result, each user, in fact, feels and perceives space with multiple senses.

This study, with its distinctive methodology, targets to enable people to be aware of and perceive a space once again in more depth by feeling the presence of the smells, textures, and experiences hidden behind what authors see and sense in the first instance. It also indicates that the meanings can be derived from the lived experiences. Definitively, the main outcome of the research is to create a dynamic framework for stating and analyzing how an individual or a group of individuals perceive the components of a re-used building. This is possible by acknowledging the human responses to architecture for deriving meanings of the essence rather than focusing purely on the physical aspect of the structures.

[Translated by Yasemin Mesda; proofread by Simon Thompson, Centre for Applied Linguistics (RCAL), Nicosia, Cyprus]

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Sources of illustrations and tables

Fig. 1	Mesda, 2020
Fig. 2	Mesda, 2018
Fig. 3	NiMAC, 2021
Fig. 4-8	authors
Table I, II	Mesda, 2021
Table III, IV	authors

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Conceptualization, Y.M. and S.K.; methodology, S.K.; software, Y.M.; validation, Y.M. and S.K.; formal analysis, Y.M. and S.K.; investigation, Y.M. and S.K.; resources, Y.M. and S.K.; data curation, Y.M. and S.K.; writing – original draft preparation, Y.M. and S.K.; writing – review and editing, Y.M. and S.K.; visualization, Y.M.; supervision, Y.M. and S.K.; project administration, Y.M. and S.K.; funding acquisition, Y.M. All authors have read and agreed to the published version of the manuscript.