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# The Functions of Housing in Response to Changed Lifestyles in Korean Residential Spaces: A Comparative Analysis of the Cases in Lifestyle and Architectural Magazines

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Abstract: The housing type of apartments, spread widely across South Korea, has penetrated deep into its domestic housing culture, thanks to their advantages in terms of convenience, resulting from the mass production of industrial capitalism, which prioritizes functionality and efficiency. However, capitalist social structures have been undergoing transformation in the 21st century. Under a new paradigm emphasizing creativity over functionality and efficiency, the characteristics of everyday life are also changing. We started with the question of apartment spaces, which featured there are only basic minimum functions with simple combinations of similar rooms, without being able to capture the current changed lifestyle. Therefore, this study focuses on newly emerging lifestyles resulting from this transition of social structures and the characteristics of residential spaces at present, centering on the "function of housing". Based on these considerations, we aimed to establish the essential function of housing that is prioritized by this era. To this end, we first looked at the changes in the functions of housing before and after modern times. We found that the functions of housing that were complex in traditional society have been differentiated and that houses have changed into a more private space along with the post-modern advent of urban public areas. However, the recent shift in social structure has led to the emergence of new lifestyles, which has also called for new functions of housing. Therefore, in this study, through the analysis of recent lifestyle magazines and architectural magazines, we compared the general public's and architectural experts' perspectives on the changed functions of housing and the characteristics of the required residential space. Accordingly, this research analyzed articles containing interviews with residents in lifestyle magazines and articles of architects and critics in architectural magazines. In addition to our previous literatures on changes in "characteristics of residents" and "relationship between individual and family," this study will ignite discussions on contemporary urban housing from diverse and multi-layered levels as an attempt to achieve sustainable housing where residents' everyday lives and their residential spaces match.

**Keywords:** urban housing; everyday life; lifestyles; social structure; creative class; function of housing; lifestyle magazine; architectural magazine

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#### 1. Introduction

## 1.1. Background and Purpose of the Study

What is interesting about contemporary urban housing in South Korea is the fact that a single type of apartment complex dominates almost the entire country, which is unprecedented even globally. As of 2019, apartments account for about 62.3% of all housing in South Korea, and in 2019, the proportion of apartments among newly built houses is over

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76% [1]. Although some experts have criticized the spread of high-rise apartment complexes, those that are simple, convenient, and functional have spread to middle-class consumers as a means of preserving and increasing assets. In other words, "South Korea's history of design in the 20th century is actually the history of the middle class, and the history of the middle class in South Korea is actually the history of apartments" [2].

This has served as a background for forming Korea's unique housing culture in a completely different way from the way apartments were introduced as low-income urban housing in the West [3]. In Korea, apartments are spread as a commodity, along with the convenience of modern residential space while various consumer social factors such as the means of asset growth and symbols of status are intertwined, making them the envy of most people.

People have to find and buy houses that best suit their personal characteristics and their family's preferences, but apartments in Korea rarely allow them to exercise such choice because these apartments' types and plans are almost similar, leaving housing consumers with little choice. If a house has a unique spatial structure in Korea, people do not consider it marketable. Because of the so-called cashability, everyone prefers and maintains a very "universal" plan favored by as many people as possible [4]. Apart from the fact that a standardized design is advantageous in terms of quantitative supply under conditions characterized by rapid industrialization and urbanization [5], this has created a social atmosphere where there is no reason to seek unit plan diversity in terms of demand. Apartments, which can be easily compared due to their uniformity, are combined with consumer's social conditions as a symbol of social position and status through branding, despite being the cheapest housing type [6].

The dualized characteristics of production and consumption of apartment complexes and their specific social structural logic are behind the phenomenon of these uniform and monotonous housing types spreading in a short time and dominating the overall domestic housing culture. Under the special circumstances of highly compressed economic growth over a short period, the paradigms of modern industrial and consumer capitalism were simultaneously combined, creating an unusual situation. In other words, in the domestic apartment complexes, the housing for the low-income class, which was provided for the reproduction of labor in the industrial society, was specially combined with housing for the middle class, which was the object of consumption that realizes the desire for difference in the consumer society [7]. The logic of production and supply of apartment complexes is linked to their consumption and demand, and by accelerating their interaction, the universal spread of apartments is possible [8]. Meanwhile, shocked by the hugeness of Korean apartment complexes, the French geographer Valerie Gelezeau published a study titled "Republic of Apartment," which allowed the Korean society to take a new critical look at domestic housing culture [9].

Nevertheless, it is worth noting that people who want to buy apartments do not prefer the spatial composition of the apartment itself. In the process of apartment production and consumption, the logic and business feasibility of the government and large private construction companies take precedence over consumers; therefore, conflicts with actual residents' requirements and lifestyles have existed since the early days of apartment move-in. In the conclusion of "Republic of Apartment", Valerie Gelezeau argues, "large apartment complexes make Seoul the ephemeral city that cannot be sustained for long" [9]. Various desires are inherent in our everyday life; thus, we cannot be complacent about economic feasibility, efficiency, and convenience, which will be further accelerated in conjunction with recent changes in social structure. Apartment complexes in South Korea, which were considered an ideal housing type in the era of industrialization and military government, have now reached a new turning point due to changes in social structure and lifestyles.

This is a very important issue in relation to urban housing's social sustainability. Sustainable design influences the relationship between human society and the environment.

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Throughout history, design has reflected the values and culture of its society [10]. To supplement the existing definitions of the city as an entity, some environmental researchers have adopted the term "urban ecosystem" to identify the qualities of urban areas [11]. Through this lens, urban sustainable development can be understood in terms of economic, environmental, and social factors. Indeed, in 2002, the World Summit on Sustainable Development (WSSD) adopted the Johannesburg Declaration, stating that sustainable development involved the balanced development of the environment, society, and the economy. According to this model and the Sustainable Communities Plan, sustainable communities are places where people want to live and work, now and in the future. They meet the diverse needs of existing and future residents, are sensitive to the environment, and contribute toward ensuring a high quality of life. They are safe, inclusive, adequately planned, built, and run, offering equality of opportunity and good services for all [12].

Among them, sustainable social development seeks to enrich the human dimension by harmonizing social relations and cultural pluralism. It views culture as the glue that binds together all other concerns and underlying political and economic behavior. Social sustainability helps to maintain humans' quality of life and harmony through socio-cultural diversity and maintains a harmonious relationship between developmental and value norms. It relates to local culture, identity, accessibility, stability, and equity, ultimately aiming to revitalize local communities [13]. Further, it facilitates efforts to promote community through residents' voluntary participation in the urban development process and through the ability to adapt to changing community needs and desires [14].

In recent years, the importance of social sustainability in housing, which has attracted somewhat less interest than environmental and economic sustainability, has begun to receive new recognition. Improving social sustainability in residential environments is crucial for the quality of life of residents, and it contributes toward enhancing their happiness. In residential environments in modern society, where many social problems, such as class conflict, the gap between the rich and the poor, and lack of communication, persist, the importance of social sustainability has increase for the establishment of social value norms [15]. However, most of the problems regarding housing-related social sustainability have remained problems of residential environments and local communities. Regarding discussions on housing, before any discussions regarding the relationship between residents and the community, it is necessary to first identify the characteristics and problems of housing itself in relation to society and social structure.

Therefore, to discuss urban and social sustainability in Korea's housing culture, the starting point should be an interest in the inconsistency between physical housing spaces and people's everyday life in those spaces. "The problem of imbalance in architectural hardware and software in it" [16] is the ultimate problem in modern Korean residential facilities. Therefore, this study focused on emerging lifestyles due to the transition of social structure and analyzed the characteristics of residential spaces that respond to those lifestyles. This is an attempt to overcome the limitations of domestic urban housing in the 20th century, which is monotonous and uniform for middle-class nuclear families, and to harmonize the residential space with the life in it to realize sustainable housing. In our previous study, we analyzed the "characteristics of residents" and the "relationship between individual and family", and in this study, we want to compare and analyze the views of the general public and architectural experts related to recent lifestyles and residential spaces from the perspective of the "functions of housing".

In South Korean society, where most people are accustomed only to apartments, it is crucial to define a changed lifestyle and residential space for a new era, but discussions on this issue have not been abundant. Most studies regarding lifestyles have mainly focused on investigating the lifestyles of each generation or their preferences statistically. At this time, most lifestyles tend to be categorized into simple listed categories such as the happiness-seeking type, self-development type, individuality-seeking type, family-oriented type, convenience-seeking type, and so on. [17–21] and the underlying system cannot be captured.

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Therefore, this study is essential in that it attempts to actively analyze the attributes of recent lifestyles and the residential spaces for them at a more intrinsic level, rather than simply defining it as an increase in individuality or diversity. It meaningfully attempts to define lifestyles in relation to macroscopic social structures for each phenomenon that can be limited to microscopic and peripheral discussions. In short, this study provides clues for discerning microscopic cases in the context of macroscopic social structures.

Furthermore, it highlights the importance of conducting preliminary analysis on public and private markets of development initiatives by exploring the changed needs for housing. We hope our research can be a useful reference for capturing fundamental indications of future developments in the sustainable housing.

# 1.2. Method and Contents of the Study

To this end, Section 2 explores the functional changes in housing before and after modern times. We examine the process of functional changes, which was complex in traditional society before industrialization and capitalism, and the differentiation and reduction of functions after modern times. In particular, we focus on the changed functions of housing, which have become more private than before, in contrast to public areas newly formed outside the residence along with modernization.

In Section 3, we present the characteristics of the new lifestyles that emerge with the transition of social structure and the changed functions of housing that are searched for in lifestyle magazines. Capitalist social structures are moving past industrial capitalism and consumer capitalism into a new phase of the creative economy, or the Fourth Industrial Revolution, and "human creativity" determines the growth of capital in the newly transformed social structure. This change in social structure is changing patterns, structure, and values of everyday life and its lifestyles. In this paper, the term "modern" will be used as for referring to the era after capitalism and modernization. However, we will use the term "contemporary" when referring to the recent era to distinguish it from the era of industrial and consumer capitalism in the 20th century. In short, we will use the term "contemporary" to refer to a recent era, where human creativity has emerged as the core of capitalism under the new social structure. In the West, this era is mainly identified with the period after the late 1990s, and in Korea, it can be identified with the period after the 2000s. Therefore, in Section 3, we examine the changes in the characteristics of lifestyles and the changes in the functions of housing that are newly sought in lifestyle magazines for the general public. For this purpose, interviews with residents that include references to lifestyles were selected as the main objects of analysis.

In Section 4, we discuss the contemporary lifestyles and the planning of residential spaces that support this change based on the views of experts in the field of architecture, such as architects and critics, via analysis of architectural magazines. We also analyze architectural experts' consciousness, architectural solutions, and criticism, focusing on the aspect of the "functions of housing" covered in Section 3.

Resident interviews and residential space cases from 2015 to 2017 (i.e., three years) were the main research subjects of the study (see Sections 3 and 4). In terms of the lifestyle magazines, "House Full of Happiness", "Maison", and "Living Senses" were selected. This was based on our prior research, which was summarized and supplemented for comparative analysis with architectural magazines. Unlike women's magazines, which often focused on celebrities and fashion pictorials, domestic lifestyle magazines with main contents relating to lifestyle, interior design, and residential space began to be published in earnest after 1990. Of these, there are currently four influential magazines that have been continuously published for more than 10 years. Among them, three magazines that were accessible in both online and offline versions were selected for this research. In terms of the architectural magazines, "Space", which is the representative monthly architectural magazine of South Korea, was selected. The "Space Academia" section of this magazine was listed in the A&HCI. The "Space" magazine focuses on domestic cases, especially

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residential cases, which are continuously covered in monthly issues. In terms of architectural magazine analysis, all residential cases from 2015 to 2017 were investigated.

The research selected magazines as research subjects because they were judged to form a meaningful means for grasping housing trends and perceptions of housing culture in the present age. This social science methodology, which is known as modernology (as opposed to archeology) forms one way to understand social structure through microscopic observation and research. In this context, attempts are being made to analyze domestic housing culture based on films and literature [22-24], but few cases of qualitative research have been conducted on residential spaces while considering articles from magazines in the architectural field. However, magazines tend to discover and capture various changes more sensitively and quickly due to their nature. In a different context from that of movies and literary works, magazines can be considered to be more reflective of reality in that they provide various examples of interviews with actual residents from among the general public. In the civilization theory, Norbert Elias expressed that norms of behavior and culture spread from the upper class to the lower class over time, becoming a universal pattern of society [25]. Therefore, lifestyle magazines of the present era could form materials that reflect not only issues in current housing culture, but also trends in society that will become common in the near future through the influences from the culture-leading class.

Magazibe analysis is also often used as a research methodology in fields related to humanities, social sciences, and design (e.g., journalism, consumer studies, advertising, education, fashion, graphic design, and so on). In the field of architecture, many studies have analyzed cases in architectural magazines as research subjects, and they are mainly used for analyzing the physical dimensions of specific buildings [26–29]. This study attempted to use a humanistic approach, which has been somewhat neglected in previous studies, based on the interviews and discourses of magazines. The factor of "lifestyle" should be considered when discussing residential spaces in the field of architecture, but discussions on specific lifestyles have been poor. Therefore, this study aims to examine in depth the topic of "residential space considering lifestyle," which has hardly been discussed in the existing architectural field.

Issues regarding lifestyle and everyday life have been considered as abstract and conventional functions, despite they have been changed sensitively in the movement of time and social structures from a macroscopic point of view. Changes in macroscopic social structure can be discussed through various academic discourses. However, research on people's microscopic real life and lifestyles is almost difficult to find, and data collection is also limited. For this reason, most existing studies have not adopted a microscopic attitude in their research methods. In particular, there have been limited micro-historical studies on a specific period in the past based on magazines [30], but studies from a micro perspective on changes in contemporary lifestyles are very rare.

Magazine analysis can have some limitations in terms of securing complete objectivity and systematization due to its nature. However, since the subject of qualitative content analysis in this study focused on interviews with residents and the personal opinions of various architects and critics, it could be suggested that it serves as a meaningful means for grasping the viewpoints of various members of the public and experts rather than the influences of the magazine publisher. Furthermore, considering the status of the magazines analyzed in this study, it can be said that they cover a significant portion of domestic discussions and are representative. Ahn and Kim (1992) said, "There is a possibility that looking at the architectural field of the time through articles published in a magazine may present a part and not the whole, but if you recognize this method as a way to consider a specific architectural field, it has its own value" [31]. In this study, magazines were selected as materials for this micro-historical approach, and this study aimed to interpret them in relation to macroscopic social structures.

Finally, in Section 5, through comparative analysis of lifestyle magazines and architecture magazines, the similarities or differences between the viewpoints of residents represented by the general public and the viewpoints of architecture experts are examined

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and the implications thereof are investigated. This helps to fundamentally explore the characteristics of contemporary lifestyles and residential spaces that existing apartment-oriented urban housing should contain.

# 2. Changed Functions of Housing before and after Modern Times

In this section, we examine the complex function of pre-modern housing, where everything happened inside the house, and the emergence of urban and public spaces after modern times, which strengthens the private nature of housing and reduces its function. In particular, apartment complexes as a representative type of housing in South Korea aim to be a simple resting place for monotonous private everyday life and for the reproduction of labor through functional spatial differentiation and individualism, which is very different from the newly emerging lifestyles discussed in Section 3.

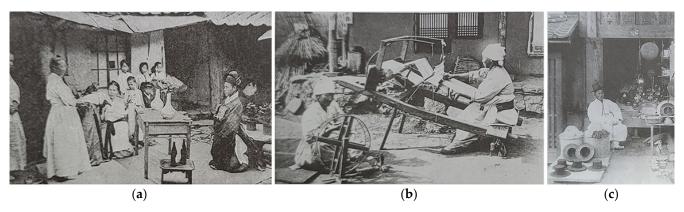
# 2.1. Complex Functions in Pre-Modern Housing

As Thomas A. Marcus points out, in the pre-industrial era, whether in the East or the West, living and working spaces were not separated from each other or were located adjacent to each other (e.g., a dairy in a farmhouse, a loom placed next to a living room or attic, a workbench next to a jeweler's living room window, and so on) [32].

Traditional Korean houses during the Joseon Dynasty also show job-housing proximity, in which everyday life and production activities are not separated. It is common for production and consumption to take place together in residential spaces without distinction between home and workplace. Therefore, all household-related activities such as milling, storing food, making and fulling clothes, and weaving, as well as production activities such as silkworm farming and raising livestock were conducted inside the houses. All the space in the house was the main living space and, at the same time, a place to make food and clothing; therefore, clothes were made at home, and all food was made in the kitchen by bringing the things produced around the house. Such self-sufficient housework was an act of production that replaced the industry of the society at the time [33].

In spatial terms, almost all everyday activities such as sleeping, resting, guest entertainment, washing, dining, and childcare were carried out in the rooms. In contrast, nonroutine activities such as weddings, funerals, and ceremonies and production activities such as drying grain, threshing, and storing agricultural equipment, as well as food preservation and housework, were carried out in the yards. In the late Joseon Dynasty, when commercial activity became active, domestic handicrafts were also active. Therefore, women made items such as cotton clothes, linen hats, and wooden shoes at home to sell at the market. Most of the Gaga (an initial form of a store), where commercial activities take place, is attached to a house, so production activities, housework, and daily life at home all happen within the residence. The tradition of home-made handicrafts continued into the Japanese colonial period of the 20th century, when large-scale factories began to appear [34] (Figure 1).

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**Figure 1.** (a) Wedding ceremony in the courtyard; (b) Home-made handicrafts; (c) Stores connected to living quarters in the traditional Korean houses [34].

Pre-modern housing was a place to accommodate all daily and non-daily life, ranging from the birth of a child to education, production activities, weddings, nursing the sick, elderly care, and the moment of death. The functions of housing were very complex compared to today, and many acts were often performed in the same place. Therefore, the layout of the traditional Korean houses consists of several buildings surrounding several courtyards so that families of different generations can live together and accommodate various functions. At that time, the houses were relatively large-scale, and each building was planned such that it could be extended when necessary.

Heating the floor and taking off shoes when indoors was essential. Western-style furniture such as a dining table, a couch, and a bed clearly define the character and function of each room as a dining room, living room, and bedroom. In the unique sedentary culture of Korean housing, Western-style furniture that defines the use of a room and occupies a large space is not used, for the complex use of space for various purposes [34].

## 2.2. Spread of Apartment Complexes and Reduced Functions of Housing after Modern Times

As the Joseon dynasty entered industrialization, production began to go beyond the boundaries of residential space, and much of the domestic work performed at home was replaced by factory-produced goods and commercial services. The various functions of housing were incorporated into society and they were performed outside the home, based on the division of labor. The daily necessities that were produced by home-made handicrafts began to be produced in factories and then flow into homes. In other words, everything that used to be made and consumed inside the house began to be made outside the house, sold in markets, department stores, etc., and then brought into the house. To earn these goods, people had to engage in other productive activities outside the home.

As people searched for new jobs in factories and offices, the field of livelihood moved out of their residences, and children's activities moved to the socialized arena of education. People who used to spend most of their time in and around the residential space and doing all the work within that radius started to spend more time in the public domain as office workers and students. As daily affairs were transferred to the public domain, time began to be divided into daily life, study and livelihood, and leisure activities [35] (Figure 2). In other words, commuting time was set in daily life, resting in a residential space after working in an office became common, and weekdays and weekends were formed differently. As such, the repeated pattern with periodicity that forms daily life is a representative phenomenon of modern life [33].

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Figure 2. (a) Women working at a rice mill and men at a printing plant; (b) Watching TV with the whole family at home [35].

These changes brought about the separation between the home and society and between the house and the city. The biggest change was in the function of the home and society. In traditional society, it was natural that individual life and social activities were mixed in the dwelling, but the modern urban structure, which was formed in earnest during the Japanese colonial period, has changed to a dichotomous structure with a clear boundary between public and private space. In the past, there was no public space, a place of gathering and entertainment; therefore, social contact—gathering and interacting with each other—was limited to residential spaces and their surroundings. However, as urbanization progressed in the tide of capitalism, production space, commercial space, and leisure space began to emerge, and much of the activities that were conducted in and around the residential space moved to the urban space. As a result, in contrast to the public space, family togetherness is now recognized as the most important function in the residential space, and the residential space has become a private space as opposed to a public space. A home is a place to rest after returning from work, and housing's most important function is now providing a resting place. The residential space where all life activities used to take place in the past has now become a place only for the simple functions of family togetherness and rest [34].

At the same time that the function of housing shifted to become the family's private everyday life and rest, the complex use of spaces before modernity also changed with the demand for individual spaces and the functional differentiation of spaces. Until the midto-late 20th century, many functions of housing were largely transferred to facilities and services outside the dwelling, and most functions of housing that were considered fundamental could be performed outside the dwelling. As a result, for example, kitchens have been spatially expanded and technically upgraded, but the time spent in kitchens has been reduced due to the development of processed foods and the increase in dining out. As such, as the functions of the existing residential spaces are gradually weakened and the urban functions and services outside the houses are strengthened, much of the work done in the houses is being transferred to the outside [36].

Despite such functional differentiation and reduction of residential functions, the size of the residential area occupied by each household and one person as well as the number of rooms have been continuously increasing over the past several decades. Compared to 6.8 square meters in 1970, Korea's per capita residential area increased nearly fivefold to 32.9 square meters in 2019 [35]. Therefore, today's living reality is a splendid and spacious empty space where many of the residential functions are transferred to the outside of the residence while there is not much time for families, and there are few guests [33].

# 3. The Emergence of New Lifestyles in Contemporary Society and Changes in the **Functions of Housing**

In the 21st century, the shift in capitalist social structure centered on human creativity has become more prominent, and the demand for a corresponding new lifestyle is also accelerating. Nevertheless, the architectural characteristics of domestic urban housing,

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represented by apartment complexes, are still not far from the industrial capitalist paradigm in terms of efficiency and convenience. However, the new capitalist paradigm that has emerged with the creative class has penetrated the everyday lives of residents and introduced a very different lifestyle from the values and norms assumed in apartment complexes in the previous era.

Therefore, Section 3 examines the transition of capitalist social structure and the resulting changes in the attributes of everyday life. In particular, we analyze lifestyle magazines targeting the general public to ascertain the changed lifestyle of residents and the newly required functions of housing. This, together with the analysis of architectural magazines for architectural experts discussed in Section 4, will help to grasp the current perception of the functions of housing from various perspectives.

# 3.1. Transition of Capitalist Social Structure and Changed Lifestyle

The 21st century society is on a continuum with the modern industrial society of the early 20th century and the consumer society after the mid-20th century, but there are fundamental differences in the structure and paradigm of everyday life. Considering the reality of being dominated by the capitalist mode of production, these changes occur primarily on the economic front. Today, the mechanical efficiency of industrial societies, the symbolic values of class, and the status of consumer societies are still valid, but they are not key elements of the economy. Rather, the value of human creativity is receiving new attention, and these changes are slowly affecting systems and values at the bottom of society. In other words, contemporary society is moving from the manufacturing and service industries to the era of creative industries, and accordingly, people's preferences, values, and overall patterns and structures of everyday life are being reshaped.

In his 2002 book, "The Rise of the Creative Class", Richard Florida presents a new paradigm triggered by creativity. He criticizes the knowledge economy paradigm of Peter Drucker, who emphasized that the future means of production are knowledge and information, and identifies creativity as the core driving force of the economy through studies on regional economic development. He argues that the fundamental fact is that the economy of contemporary society is driven by human creativity. It is now self-evident that human creativity will become the most important resource in the future, not only for the creative class, but also for the core of the fourth industrial revolution and artificial intelligence era. What makes this even more interesting is that, unlike before, we have entered an era in which the means of production, that is, creativity, are managed not by the capitalist class but by the workers. Florida describes the structure and characteristics of everyday life at various levels in "The organization man" in the mid-20th century and "The creative class" that began to emerge gradually from the late 20th century [37]. Table 1 shows the comparison.

	William H. Whyte	Richard Florida
	"The organization man"	"The creative class"
	The age of organization (mid-20th century)	The age of humanism (21st century)
	enterprise as a source of economic development	people as a source of economic development
	stable, repetitive, and predictable promotion based on the vertical hier-	intuitive, unconscious, and unpre- dictable
attributes	archy	experience and option rather than
of work	top-down, clear labor distribution,	promotion
	specialization	horizontal, professional, and inter-
	Protestant values	active

		individual needs, desire, and satisfaction
human identity	pursuit of identity collectively in an organization company, church, and neighborhood define a person's identity social capital rather than individual lifestyle	pursuit of identity individually (interested in the meaning of life and freedom) job and lifestyle rather than company regional lifestyle rather than social capital
norms and lifestyle	values and norms of an organization (institutionalized individual) homogeneity, obedience, adaptation, stability, integrity conservative and traditional control and supervision (vertical command) formulary routine (nine-to-five) division of work and leisure grey flannel suit like a uniform (military)	self-expression and individuality acceptance of diversity and difference, respecting others' ability progressive, practical, and openminded toward new things self-determined norms managing their time flexibly mixture of work and lifestyle dress as they please (express themselves like artists)

As such, creativity, which is rapidly emerging as a key element of the capitalist social structure, is accompanied by changes in new lifestyles and values. Therefore, it becomes more important to support the new lifestyles and to understand and consider human values and atmosphere in urban and residential spaces.

# 3.2. Lifestyle Magazines' Perspectives on Changes in Functions of Housing: Residential Spaces as Work Spaces

The pre-modern residential space, where everything happened in the house, was completely separated from the workplace after the Industrial Revolution, and a new lifestyle of commuting was created. However, work and life cannot be completely separated due to the nature of contemporary society, which requires more human creativity. Moreover, technological advances such as Internet networks and smart devices are now providing an environment where people can work anytime, anywhere. In this situation, the new lifestyle that lifestyle magazines pay attention to is the search for a residential space as a work space that is newly needed again in the house.

The following cases confirm that the house is no longer a monotonous resting place as opposed to the workplace: "But it couldn't completely separate work from home. Her company also sells illustrations she drew. She often had to work at home because she usually started drawing with the idea it would be good to decorate the home with a certain kind of image" [38]; "Opposite the table in the living room is a small office space. The desk with laptops, various wedding drafts, wedding props and some writing equipment seem to be the daily look of a home, but her atelier's infinite planning power makes a splash here" [39]; and "The Korean traditional house, chosen as the couple's new home, had to have two functions: a home and an office for the wife, who runs a clothing shopping mall, to work from home" [40].

The search for residential spaces as work spaces differs in character and design from that in most apartments. One of the common bedrooms was called "a study" in which one could concentrate quietly, disconnected from other spaces. In creative work, the following cases show that "openness" is the most important characteristic of a workspace required in a house to increase work efficiency: "Ordinary Korean studio apartments are similar in structure and stuffy due to their low floor height. This place is on the first floor of the

building, and I liked it because it can create a residential space and work space with a nonobvious atmosphere" [41]; and "The work desk was originally in a different place, but I liked the open place, so I moved it to the living room" [38].

The most preferred method for this is to create a work space in an open living room or to open a wall facing the living room and install a sliding door or a folding door. Currently, residents tend to prefer glass doors. This is because, visually, it is always linked to adjacent spaces to secure a sense of openness, while acoustic separation is possible depending on the opening and closing of the door, allowing flexibility in changing the function of the space as needed. The following cases reflect this preference: "The family room between the living room and the master bedroom is finished with a transparent glass sliding door like a showcase. Sometimes when I'm working on a translation at home, closing the glass door allows me to focus perfectly. I am satisfied with the fact that work and life are separated and communicated at the same time" [42] (Figure 3, left); "The alpha room attached to the living room has been transformed into a study. Alpha room refers to a service space that can be used for various purposes in newly built apartments. It is usually located at the end of the hallway or between the rooms, but in this apartment, the living room and the alpha room are facing each other, so a study could be made as an extension of the living room. So she installed a transparent door and wall in the alpha room to create a study where both inside and outside of the study can be seen" [43]; and "The folding door is usually left open and closed when necessary to create an independent space" [44]. Another example is the case of a couple running an online shopping mall: "What is unique is that the original room was finished with glass to create a new home office space. The office space finished with glass, which can be applied only in general offices, makes the inside of the house even more unique. (...) In the home office space, a long desk and bookshelf are placed and it looks separated from the outside to some extent, but does not look stuffy because it is surrounded by glass" [45]. The following is also a case that show the need for a workspace separated by a glass sliding door. "Next to his son's room, he created a study space with a glass door. Since he works alone, he often works from home or leaves the field, so he puts a large desk in the living room so he can do his work here. Sometimes he uses the library when he wants to read a book or work quietly" [46]. This requires an open space that is different from the existing disconnected study, which is suitable for work that requires more solitary concentration than creative ideas. An open workspace is not just a visual trend but is in demand for its function as a work space where creative work can be conducted.



**Figure 3.** Open workspace with soft boundaries and visual connection. (Source: 'House Full of Happiness' of Design House (left and center), 'Maison' of Marie Claire Korea (right)).

Open workspaces or transparent yet adjustable boundaries are also linked to the possibilities of multi-spaces for families. In a prior study, we discussed changes in the "characteristics of residents" and the "relationship between individual and family" in contemporary society. There were many cases where residents had a wide variety of professional hobbies related to the field of culture and art even in their jobs not directly related to art,

which allowed them to constantly pursue their individuality and identity. In addition, while the existing atmosphere of the family was patriarchal and individualized, which prioritized the achievement of individual goals, now, even when each person is immersed in his or her work, they constantly try to feel each other's existence and to communicate in various indirect ways. Thus, attempts are being made to more actively seek the connection between spaces to maintain soft and flexible communication with family members even when they enjoy their individual hobbies, rather than the existing isolated, differentiated, and partitioned rooms [8].

Therefore, an open workspace goes beyond its role as a work space and becomes a space for active hobbies and leisure and a space to create a sense of togetherness while leading their own everyday lives, as reflected in the following cases: "Removing the wall and installing the folding door was a masterstroke. Usually, it can be opened and used together by the family, but when working, it can be closed and used as an independent space. With wide visibility, I can look at children at work. (...) It is also a family study and a hobby space for my husband. (...) Nowadays, my husband, who is into playing the guitar these days, sometimes holds small concerts. It is currently used as an office and family room" [44] (Figure 3, center); and "A study originally means a room for reading books or writing, but these days, it is widely used as a multipurpose space for simple work, music, and computer work. A transparent study that can support many events will be used as another family space" [43]. The expression "transparent study" emphasizes this open workspace. The open space as an infrastructure for family communication, which was preferred in terms of the "relationship between individual and family", is also consistent with the open characteristic required for residential space as a work space.

One reason houses have become a space for production again is that for most creative jobs, people can work anywhere with simple tools such as a computer or smart device, the Internet, and a table. The following case is an example of this fact: "Because I work on videos, all I need is a laptop" [41]. Thus, a table of sufficient length and area is an important device for work, as reflected in the following cases: "In the largest room, there is a 3m long table, which is used for multiple purposes, such as a guest table, a drawing table, and a desk where she reads books or works with her husband" [47]; and "The living room is divided into a main living room with a long wooden table and a small drawing room that can be opened and closed with a sliding door. Living room and kitchen can be opened and closed as necessary while mirror partitions are placed between them" [48]. Just as the open and complex use of space was preferred, tables also play various functions by providing a multi-space.

It also requires a space structure that can be remodeled using an open plan, as shown in the following cases: "A folding door was installed between the office and living room, which was possible because the wall between them was a non-bearing wall that could be broken down" [44]; and "This building has the advantage of being able to reconstruct the walls newly because it has very little load-bearing walls" [46]. There is a limit to the existing Korean apartments, which are wall-type structures. In apartments, most of the walls are built with load-bearing walls, and the rooms are uniformly constructed, prioritizing only the independent and uniform division of each room.

Furthermore, there are cases where houses are more actively operated as educational, cultural, or commercial spaces, as shown in the following case: "She became an expert in forest education after studying at the Forest Research Institute, which was her area of interest. (...) These days, she runs an ecological humanities salon with two of her friends. The reason she secured a spacious living room is because she wants to hold small seminars" [49] (Figure 3, right). Some people try to transform their houses from a simple personal work space to a social, shared space, or use them as a space for small classes by extending the living room to adjacent rooms and opening the space between the kitchen and the living room, where the dining table is placed. The following case shows the advantages of such renovations: "I was looking for a place for a cooking class, but I couldn't find a place I liked. (...) While renovating my house, I thought it would be good to take a

class here. I thought there would be no place like home as a cozy and friendly place to relax and enjoy comfortably" [50].

As such, various programs are combined within a house, and houses are also reborn as active "multi-residential spaces" beyond the function of simply housing. Residential spaces are cleverly combined with commercial spaces, cultural spaces, or workspaces, and the functions of housing are constantly changing. This can be seen in the following cases: "Just like a house gallery that serves as both a residence and an exhibition space (...) These days, more and more places are using the house as a workshop and running classes. We also considered this house as a suitable place for various classes and house parties" [48]; "The couple dreamed of a traditional Korean house with a modern commercial space" [40]; and settling down in an area suitable for their lifestyle of walking and surfing, "On the first floor, there is the design office of the owners and a shared dining room for guests visiting the guesthouses. The second floor is the residence of the owner couple, and there are guest rooms on the third floor. (...) There is a wife's pottery workshop in an annex with a deck in between" [51].

# 4. Characteristics of Contemporary Residential Spaces According to Changes in Lifestyles: Architectural Magazines' Perspectives on Changes in Functions of Housing

As creativity emerges as a key factor in the capitalist economy and the fourth industrial revolution in the 21st century, work and life are not completely separated due to the nature of creative work, and thanks to technological advances such as computers and the Internet, an environment where work can be done anytime, anywhere, has been created. Section 3 pays attention to the phenomenon in which the residential space is reborn as a space of production under such circumstances. The open workspace for this purpose is a kind of multi-space. Beyond the function of a simple work space, it has become a space for the active hobbies and leisure of residents who are constantly pursuing their individuality and identity as well as a place of communication for families. As such, the consulted lifestyle magazines were trying to actively show the changes in the function of housing as a newly strengthened creative workspace beyond the functional differentiation and reduced housing functions after modern times. There has been an increasingly strong preference for an open architectural space in which each room is flexibly connected with other rooms and for multipurpose and complex rooms opposed to a set of disconnected private rooms. However, in the consulted architectural magazines, interest in changes in the social structure was poor, while interest in privacy and view was strongly evident.

# 4.1. Pursuit of Privacy: Closed Layout towards the Street and Openness towards the Inner Yard

While lifestyle magazines mainly focus on interior spaces, it is natural that architectural magazines place greater emphasis on the layout of the building. However, it is disappointing that the logic of the arrangement of buildings is focused on securing introverted privacy similar to that of an apartment, as shown in the following cases: "The architect also chose privacy over the relationship with neighbors. (...) The interior space of the home and the exterior world is clearly distinguished, as if it is cut with a sharp blade. The window is minimized and can only view outside from the dining room and the deck. This limited view is a method of maintaining privacy. It is hard to imagine any compassion towards the outside world. It is as if one is looking outside while hiding inside a nest" [52] (Figure 4, left); and "(...) thoroughly separating the indoors from the outdoors. This was probably decided to prioritize the privacy of the residents, rather than to facilitate extended communication with the outdoors. Narrow reclusive windows, a barely exposed indoors wrapped within a concave wall; this is by definition a white cube" [53]. The focus is on creating a closed space centered on the family by clearly separating the inside from the outside.

To secure privacy, it is important to avoid visual interference with neighbors during the layout and design process. Therefore, the following solution was offered: "As the living rooms and windows of surrounding houses of the site were open toward this site,

there were some complaints from neighbors. As such, a position of the opposite building's windows was mapped, and this was applied to window design of SHHousing to avoid excessive visual interference" [54]. A specific proposal is sometimes adopted as in the following case: "Her explanation that the butterfly-shaped plan had additional merit in blocking the gaze of neighbors was crucial to giving the client the required confidence. (...) They have enough space at the front and back, but they are close to their neighbors on both sides. Butterfly House, opening its arms at a gentle angle towards the yard, has an appropriate form that can naturally block the gaze of its neighbors" [55]. This is because "The real problem is the visibility of the neighbors" [56]. Therefore, a layout for securing privacy in an urban context is regarded as the highlight of the architectural plan as in the following case: "The 'Four houses for Brothers and Sisters' are facing neighboring buildings on three sides, and there is only less than 2m space between them. In such a situation it's hard to make a large window to capture sunlight. It seems there is no other way for small rooms to solve their lighting and ventilation issues, but a living room which occupies the center of the house and a large window next to it carefully positioned so as not to be exposed to the eyes of neighbors. Also, they are arranged to prevent interruptions among the four sisters, the owners of the four houses. This is the best part of this project" [56].

The need for absolute privacy is partly due to the interests expressed in the following case: "Both the architect and her clients are more interested in obtaining the freedom to walk around in their underwear at home, rather than concerning themselves with what's going on outside" [57]; and "I suppose the householder must have felt most fulfilled when sitting on the toenmaru(traditional Korean wooden porch) looking at kids play. (...) The only large window on the first floor in this so-called '01 House' overlooks a wall. (...) Therefore, it is open, but is not facing anything. The only exterior the house is facing is the yard. It is not the view outside the house but the lives of those living inside that the house is overlooking. (...) The architect is intentionally placing more emphasis on the lives within the house" [58]. In addition, the following case reflects the domestic urban and architectural policy of creating a new-town housing district and selling at the same time: "There is no context and precedent in residential districts which have no promise of construction even though they are already sold out. When there is no knowing who will be my neighbor, the easiest response is isolation from the outside" [57]. Generally, the open layout toward the central courtyard is the most common way to secure privacy, as shown in the following cases: "A closed layout is disconnected from urban streets by reversing opening toward the garden in the internal circulation. (...) It emphasizes the separation from the street as if it demonstrates the model of urban housing and even thick wall in the garden forms inward-looking spatial system" [59]; and "The U-shaped building surrounds the courtyard and faces south. (...) This house, excluding the sophisticated wall and details, has a plan that can be easily expected from that of urban courtyard housing" [60].

In the case of Pangyo, which is a typical residential district for a new city for the middle class, there is an area that restricts the installation of fences. This is intended to create an open community by removing the fences and securing the public nature of the yards, as in the Western cultural area. However, the guidelines for restricting the installation of fences for open communities also tend to result in a courtyard type, which is the most common solution for privacy, as explained in the following case: "At this point in time, Koreans probably instinctively envisioned a fence surrounding a garden as a means to distinguish 'my house' from the road, accompanied by a spatial composition in which the indoors opens out onto a madang (courtyard) when they thought of single family house. To these people, the madang is a private space that should not be open to one's neighbors. As such, it is likely that in an attempt to realize the contemporary Korean typology of single houses within the unit district planning guidelines of Pangyo district, architects have ended up composing a closed off outer wall against the road. As a result, the Pangyo housing district has become an amalgamation of different single houses that

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refuse to conform to the other, using their outer walls to astutely stand with their backs to the road. (...) Thus, the majority of houses have indoor spaces facing into their central courtyards, for the sake of securing privacy" [53]. It is becoming a prototype in itself in the Pangyo housing complex, as shown in the following case: "When I approach a lot in the Pangyo housing complex, I personally see myself designing a U-shaped or a square shaped house" [61]. At this time, a closed exterior facing streets and an open structure facing the inner courtyard are essential, as shown in the following cases: "The layout of the house hugs the three adjacent roads in the shape of a 'U', forming a boundary between outside and inside, with the courtyard and living room placed in the central area. Considering the quality of lighting and the necessity for privacy, (...) In terms of its spatial characteristics, according to the preferences of the client, the interior was completely shut-off from the exterior, and the interior space enjoys an open spatial organization" [16]; "With a garden at the center, (...) It becomes a space that is protected from the outside world and is separated from the public realm" [62] (Figure 4, center); and "While its exterior is finished by grey hard stone like as coconut shell, the interior is white and sweet as coconut flesh. The building has a courtyard that maintains the original shape of a square" [63].







Figure 4. Examples of Residential Spaces that Pursue Privacy (Source: "Space" magazine).

Efforts to link these courtyard housing types with the Korean traditional urban housing type are also noteworthy, as shown in the following cases: "It is quite interesting to plan a courtyard by placing a garden to divide house mass in a single house. (...) Solving the privacy issue through a courtyard is the right answer in a house at the city center. (...) Actually, an enclosed plan itself is not a strange phenomenon. It is a common strategy for a city" [57] (Figure 4, right); and "In dealing with the issue of typology, it must be underscored that the urban context in Korea afforded very few urban typologies to the architect or to the developer. (...) The urban hanok (traditional Korean-style house), for example, was one of the few modern typologies that evolved in the context of a modernizing Seoul" [64]. The domestic architectural reality, that has poor housing precedents, is also evaluated as follows: "The form of placing a courtyard in the middle naturally emphasized privacy. (...) The courtyard type of this architect can be considered organic because it follows the type of urban traditional housing in Korea which emphasizes privacy" [52].

However, securing a courtyard of an appropriate size by applying the courtyard housing type to the standardized and limited area of the housing district faces an inevitable limitation in that the internal space becomes thin, as indicated in the following case: "When the XY axis depth is sufficiently planned according to a standard living room, kitchen, and dining area, securing the horizontal depth to view the courtyard becomes difficult. It becomes more problematic when the volume surrounding the courtyard is more than two stories high" [61]. It will not only pressurize the courtyard horizontally but also vertically. Therefore, it is naturally composed of a single-layer house like the Korean traditional urban housing. This is supported by the following cases: "If we view the Park House as a tangible attempt at Korea's new town housing, it is very fascinating. From the Pangyo new town housing, designed by the architects, courtyard housing is easy to find. (...) Excluding the fact that the Park House has two floors, it has a similarity with the

construction strategy of U-shaped hanok, traditional Korean housing. To create a house with a courtyard on a site that is not large, the plan must be created with a single layer like a hanok" [60]; and "(...) a series that resulted from observing urban residents. The basic form was like an urban hanok, (...) all the movements within the house are centered around the garden, making the interior and garden into a single whole" [65]. Thus, the approach of privacy is positively accepted when the genealogical connection with the Korean traditional urban housing is identified.

Nevertheless, this closed arrangement, which prioritizes privacy, is also frequently criticized, as in the following cases: "The selection of walls and windows that put privacy first seems to lack in their ability to embrace the plentiful lives and memories of the residents" [53]; and "The courtyard style house is surely an optimistic architectural type, which forms an intimate relationship with the yard. However, the role of the yard is reduced to securing privacy and lending a visual openness when this composition meets the unique condition of the Pangyo housing complex. There is a high chance that it will become a taxidermy space, which will have lost its function" [61]. It also raises questions like, "Is it any different from an apartment?" [52]. In the case of detached houses published in architectural magazines, the ideal types of housing beyond apartments need to be explored. However, if an architect becomes rigidly obsessed with absolute privacy, the project fails to present a new vision and is no better than an introverted apartment. Recognizing this, the architects struggle to design a house that can revitalize the street instead of a house that is cut off from the city, as in the following case: "In order to provide privacy, fewer windows have been placed along the public roads, and due to this, the wall which should be transparent is transparent only in principle. We did not want the provision of the owner's privacy to be the reason for choosing a closed exterior" [66].

## 4.2. Pursuit of the View: Variety of Landscapes and Sequence of Spaces

The pursuit of the view, along with securing privacy, was an essential element of residential space planning. Basically, the desire for open land and land with a good view is also evident, as reflected in the following cases: "The house shouts out that its innate top priority was to view the ocean" [65]; and "(...) in front of the built-in bookshelf sits a desk, whose direction (more than any other feature) reveals precisely what the client wanted for the space. It wouldn't be an exaggeration to say that the origin of this house's existence is found in the view over Techno Valley beyond the windows that open towards the east" [66]. In a land that has the potential for a better view even among the stuffy urban plots, the view acts as the main concept of the overall layout and composition, after privacy, as shown in the following case: "At Jeonju House, the best view is on the upper level. At ground level, cars pass by on two streets and there are neighboring houses, but if you look up the view out to nature is beautiful. So, basically the building mass on the first floor (...) where one can operate movable walls and adjust the aperture for views out to this amazing scenery. (...) Movables walls can open and close space. There are three side streets and a neighboring house so the walls are usually closed but you can still see the mountains in the distance" [67].

The view, along with privacy, acts as an essential principle in the layout and composition of the entire housing. However, privacy is relatively based on the requirements of the client, while the view is based on the wishes of both the client and the architect, as reflected in the following cases: "I wanted to express this nature more strongly: here, there are open views framing the beautiful surrounding nature as desired by the client" [67]; and "It is every architect's desire to work on a site with remarkable scenery" [68]. At this time, the architect is concerned about how to capture the landscape, and it is common to attract nature through a transparent boundary, as shown in the following case: "Instead of blocking the views with the walls, windows and floors, glass was used along the entire elevation" [67]. On the other hand, the traditional method of "chagyeong" (borrowed scenery) is also used for views, as it refers to the type of Korean traditional urban housing for privacy and tries to prove its logical basis and historical genealogy, as shown in the

following case: "Paradoxically, one has to conceal the scenery in order to capture it. Since good scenery can be contemplated and enjoyed without necessarily existing in a built environment, it is more important to figure out where to moderate and cover up. The term chaqueong means more than bringing in the good scenery, but an active action to cover and hide bad scenery. (...) It is the result of hiding and moderating" [68].

However, similar to securing privacy, there are also criticisms of the view as a simple picture frame. In Korea, especially, the word "view" is used quite commonly. Real estate agents woo customers by saying that the view is good, and architects describe their work with a particular view or scenery. It is not surprising, as it is a well-known fact, that in ancient Korea, the view from inside buildings was the mainstay of architecture. In the real estate business, the "view" is a commodity that is bought and sold. When the view meets Le Corbusier's idea of dominating the exterior world as "residential areas are a frame for view", this concept of the view is right along the lines of Guy Debord's "Society of the Spectacle" (1967) and its astute depiction of modern capitalist societies and characteristics. From the perspective of Guy Debord, Le Corbusier's concept of the view is a sort of "spectacle" that is commoditized [16].

Therefore, to overcome the limitations of the view as a simple picture frame, it is primarily intended to introduce landscapes from various directions and angles, as in the following cases: "All units on the second floor are provided with terraces or courtyards that serve as medium spaces between indoors and outdoors, and each face different directions offering different views" [69] (Figure 5, left); and "The yard has a long range view of the scenery. From indoors, the house provides space to observe the surrounding area at the utmost detail. A terrace and yard were placed in the upper yard to look out on Inwangsan Mountain and the lower yard to observe Bukaksan Mountain. The aisle, living room, and main bedroom have windows that watch over the pine trees and landscape at different heights and distance" [70]. Furthermore, the pursuit of the view is considered in a spatial sequence, as in the following case: "Instead, the transitions between the spaces which unfold over five floors, was solved by sequencing space that works together with the near and distant landscape. From the chaqueong (borrowed scenery) on the first floor of the four-room, traditional structure – a sarangchae (study) and sadangchae (shrine) that was constructed according to the client's request - to the sectioning of windows and doors encompassing the green landscape of the magnificent Mt. Namsan, the project is faithful in its construction of a living space with a modest fenestration" [71] (Figure 5, center).







Figure 5. Examples of Residential Spaces that Pursue the View (Source: "Space" magazine).

The sequence accompanies the movement of the body. While moving your eyes, turning your head, and moving your body, you make the same landscape feel different depending on where you stand according to the subtly curved angle and protruding part of the space, as in the following case: "Nonetheless, Yoon's view does not come down to one 'picture'. The walls, ceiling, and floor tug and pull at each other in a subtle way so that framing a view is not possible. The vertical and horizontal surfaces almost never meet at a single point. They always criss-cross and create movement" [16] (Figure 5, right). As

a result, it becomes a view that is completed through the intervention of the body, and thereby acquires the "depth" of constantly forming a relationship with the residents beyond the limits of a picture that exists as a separate entity.

# 4.3. Stability of Dwelling: Physical and Mental Relaxation and Recharging

This phenomenon of absolute attention to privacy and view can be interpreted as architects' failure to respond sensitively to the interest in new lifestyles or changes as well as the architects' focus on functional design of urban housing immersed in conventional planning practices. However, it may be understood that the architects are more interested in the stability and essence of an unchanging dwelling than in temporary trends or changes in housing. In other words, in architectural magazines, the house is essentially a place for mental and physical rest, and the function of housing as a comfortable shelter is of the highest importance.

For example, "reviewer A" says that although the architectural quality of a house is high, it is questionable whether it suggests any new daily life due to the lack of the design based on lifestyle. This means that there is only beautiful space. On the other hand, in the case of "reviewer B", the most emphasized point is that there could be some uncomfortable factors regarding "function" because the way that one can see the interior of the living room from the entrance seems to be a problem regarding privacy [60]. In other words, architects have an obligation to present a new ideal beyond privacy and view, but it is still a valid principle to remain faithful to the original functions of housing that have been accepted conventionally. In the case of architects, they tend to be more complacent with the practical point of view than critics who are relatively free from such considertions.

Despite these differences, both architects and critics seek to present home as a comfortable shelter. Some architects preferred houses to not be overly bright as in the following cases: "I feel uncomfortable whenever I see contemporary buildings with large openings. It could be even worse if it is for a residence because personally I think it is often feared that it would only allow too much light inside and violate my privacy. Of course, it can be controlled with a variety of devices, such as curtains or louvers, but they can't be used as the fundamental solution. Thus, I proposed small and unique windows to my client for this project. At first, they were concerned that it would be too dark inside but it has resulted in a space that has both sufficiently bright spots and dark ones" [72]; and "The balance between practicality and aesthetics is also reflected in the external appearance of the house. The elaborate exterior, which recalls abstracts painting, considers both a practical purpose and an aesthetic attitude. Concerned about the risk of over lighting the interior, the architect makes elaborate decisions about the size of openings" [62]. Critics also recognized and valued light as well as the appropriate darkness for real everyday life, as in the following case: "Considering the emphasis placed on brightness is so excessive, the fact that dark spaces and minuteness are lacking is also unfortunate" [73].

In terms of materials, they tend to consider the continuity of everyday life, respect life itself, and prefer simple materials that match the surrounding landscape, as in the following cases: "Neutral materials are used in a neat manner to create dignity, and the simple style is used to create harmonious scenery with the surrounding environment" [74]; "In terms of materials, the warmth of the bricks and the design of the Douglas fir panel and exposed concrete creates the sense of a settlement, as well as of nature and time as a residence" [59] (Figure 6, left); and "Choosing the material that fits the place and scenery is always a difficult process. Architectural experiments with new forms and materials are mostly fresh, but are sometimes unsuitable and unfamiliar. The architecture that I want to create is something that can easily be found in daily life, and uses common materials efficiently, and is placed in an acceptable environment" [62]. There is also an attempt to be "(...) merging seamlessly into the landscape as if they had been there for a long time. The simple walls stay low to the ground and the cement brick, the main material, is neutral and blunt. Like a small temple in the mountain, the simplified wall surfaces

and plain materials of achromatic color make the landscape stand out more clearly, while bringing the interior into a static state" [62].







Figure 6. Examples of Residential Spaces with Stability of Dwelling (Source: "Space" magazine).

As such, especially in the case of housing, there is a tendency to prefer frugal materials and restrained expressions with the amount of light that considers everyday life. On the other hand, excessive and heterogeneous materials and the use of light for dramatic visual experience and spectacle are criticized, as in the following cases: "The various spaces from entrance to the rooftop and the alternation of light and shadow is interesting, exciting even. However, the visual disorder and excessive use of materials seems inevitable" [61]; and "This comes from the uniqueness than normality, but somehow it does not feel all that comforting. Maybe it's because the 'value as a normal house' is only vaguely present" [61].

In the same vein, minor consideration for residents is by no means trivial in the case of housing, as shown in the following case: "The ordinary pattern of daily life is to go in and out from an interior and exterior. The multiple entrances in the house are one of the most attractive elements. The wind corridor on the lower part, which catches the eye from the left side of the entrance courtyard, and the opening at the water supply seem like the result of a close observation of the family's daily activities. One would presume that this house will be a good place for the old lady to work comfortably and familiarly "[75].

In addition to light, materials, and movement, the basic bodily senses, which can be easily overridden by the visual and aesthetic dimensions, must also be considered. The bodily senses that the architect missed go beyond simple discomfort and may not be addressed by a dwelling for reflection and contemplation, as shown in the following case: "There were several places within the house in which these basic senses, such as walking, sitting, lying and touching, were absent. The maru (wooden floor lifted from the ground) which was planned within the emptied space at the center of the house, seemed similar to a jjongmaru (narrow wooden veranda lifted from the ground) in a country house, yet it was difficult to sit as the floor had been raised too high. (...) The hobby room, in which one had to take off one's shoes to enter seemed a little awkward and uncomfortable as the outer stylobate and the inner height were the same. The doors on the inner partitions were too quick to respond to movement, lacking in a sophisticated sensation when opening and shutting, making one anxious as to whether any sense-enticing depth may be disrupted, such as moments of silence or thought" [76].

The architects and critics also criticize architecture that separates human life from its outer skin due to curtain walls, although aesthetic achievements have been accomplished since Miss Van der Rohe's minimalist architecture, and they re-propose walls that can be occupied by the body, as shown in the following case: "Though a curtain wall is a medium through which to connect us to the outside, the envelope grew apart from us. It was impossible to imagine making an alcove or putting furniture against a wall any longer, but we looked outward or sat opposite the table turning their back toward the outside area.

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(...) A 'Thick wall' is an alternative for this dilemma and a return to the primitive condition. Applying the concept of depth to the envelope, it is designed as space for life. Depth was increased to make qualitative change, and it is not a simple window but is intended to play the role of inhabitable walls" [77].

In architectural magazines, the most important function of housing is that of providing a comfortable and warm shelter as a place for physical and mental rest. In addition, things that remain unchanged over time and that shine in the presence of time are more valuable than things that change with trends. One magazine states, "Sensing the limitations of large-scale and forceful forms, which intend to alter the human emotional response, Jeong is searching for 'the house of rest', which brings comfort to its dwellers" [62]; and "This goes together with my passion to create a space that gives the residents a sense of comfort, instead of a space that tries to catch people's attention. Clear, bright and strong images, sometimes met in nature or in the city, are undeniably very attractive. However, something that exists without change over time, and shines brighter throughout that time is much more touching. That is architecture, and that is a home" [62] (Figure 6, center).

These houses should be not only spaces for physical rest and comfort but also spaces for mental rest and contemplation, as reflected in the following case: "I think the interior should be cozy, because it is where one gets rest and recharge. It shouldn't be boring either. The spaces in little houses don't have to be unified, but can have various characteristics. They should have minute distinctions, which would allow just enough tension. Coziness and tension will benefit and enrich each other" [78].

The consequent traces of everyday life are more precious than anything. As reflected in the following case, the landscape of such an everyday life in a house is considered more meaningful than empty visual spectacles or directed images: "The house was well kept, but traces of its use could be found everywhere. In fact, traces of use are very important in a house. While it is common to have the photos of the clean and empty architectural landscape of an empty space in an architectural magazine before the tenants move in, it is truly inspiring to see the raw landscape of a house aging together with the tenant in harmony" [79] (Figure 6, right).

#### 5. Conclusions

This study is an attempt to align residential space with the life within it in order to overcome the limitations of monotonous and uniform Korean apartments, and to realize sustainable housing. To this end, we paid attention to the emerging lifestyles resulting from the transition in social structure, and, accordingly, the residential spaces that require changes from the perspective of "function of housing." Interest in the function of housing forms the essential nature of housing in this era. For this purpose, this study analyzed articles from lifestyle magazines and architectural magazines, and through this, the perception of the general public and architectural experts was comparatively analyzed.

To do this, we first analyzed pre-modern and post-modern changes in the functions of housing. We identified complex functions and multipurpose uses of space in the traditional society. After modern times, however, with the differentiation of functions and the emergence of public domains such as factories, offices, and schools, most functions of housing were transferred to the city. Therefore, the functions of the past in residential spaces were reduced, and the private character of housing was strengthened.

The modern capitalist social structure has evolved through the industrial society of the early 20th century and the consumer society of the mid-20th century. Furthermore, around the 21st century, the capitalist social structure entered a new phase again. In the new social structure, human creativity is emerging as the driving force of capital. Therefore, it has become more important to understand, support, and consider new values and lifestyles centered on human creativity in existing cities and residential spaces.

Most of the resident interviews in lifestyle magazines reflected an interest in changing residential spaces into workspaces. This suggests that, even if residential space has

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been separated from the workplace since modern times, now there is a growing demand for combining the function of work and production within housing again. The pursuit of a residential space as a workspace became possible, thanks to technological developments such as the Internet and smart devices, and this new workspace requires openness and flexibility in terms of space. In particular, residents often wanted to be visually linked but also wanted to be able to be disconnected auditorily or spatially when necessary. Rather than functional differentiation, they preferred the complex use of spaces, as in Korean traditional housing. The workspace tends to be a multi-space that can be used both as a space for family togetherness and a space for leisure. For this reason, the rigid wall-type structure of typical apartments was regarded as hindering complex and flexible spatial use.

Contrarily, architectural experts' articles in architectural magazines tended to be somewhat different. First, privacy and view, which have been emphasized since modern times, were still recognized as the key logic of housing arrangement. Little was mentioned about the residential space as a workspace, which the lifestyle magazines focus on. Instead, architectural experts concentrated on physical and mental comfort and rest, which have been considered the most representative functions of housing. Architectural experts preferred a housing that was faithful to the original purpose of the housing including comfort and stability, rather than aesthetic, unfamiliar, and innovative experiments. In other words, a house that is faithful to the basics of a house, and therefore preserves its original value as a "house", was desirable.

As such, the analysis of lifestyle magazines and architectural magazines presents different perspectives. Lifestyle magazines showed a tendency to actively apply newly changed lifestyles to housing in line with the changing social structure. They refected a search for a residential space as a work space. Architectural magazines, on the other hand, did not react sensitively to such changes, and especially valued the function of the house as a comfortable shelter with privacy and a good view. The conservative views of these architectural experts show a rather stale attitude and slow pace in accepting new trends compared to the general public. However, in some respects, it may be viewed as an attitude that prioritizes unchanging essential values rather than temporary changing trends.

In our next research, we will explore the direction of housing planning to clarify the ideals of housing in this era. Through this, we intend to synthesize various layers of analysis on the characteristics of lifestyles and residential spaces under the current social structure.

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