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Space Designs of the Future: Innovative Perspectives at the Intersection of Cinema and Architecture

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Abstract

The study explores future spatial predictions through the relationship between modern and contemporary architectural movements and visual arts. Cinema, particularly science fiction, inspires architecture with its creative narratives and innovative spatial concepts. Influenced by modernism, the future envisioned in Playtime has largely come true. Accordingly, three cinematic works influenced by contemporary architectural approaches were selected and analyzed for their spatial and technological predictions. Minority Report, Blade Runner 2049, and the 2022 series The Peripheral were analyzed using semiotic methodology. The analysis was carried out in three main categories: architecture and form, the relationship between space and social life, and future predictions. The findings reveal that cinema, through its flexible design opportunities and visual impact, offers innovative ideas that inspire the field of architecture. The spatial depictions in the three analyzed works provide significant clues about how physical structures, technological integration and forms of social interaction might shape in the future.

Keywords: *Modern architecture, contemporary architecture, urban design, urban identity, visual arts.*

Geleceğin Mekan Tasarımları: Sinema ve Mimarlığın Kesişiminde Perspektifler

Öz

Çalışmada modern ve çağdaş mimarlık akımları ile görsel sanatlar ilişkisi üzerinden gelecek mekân öngörüleri sunmak hedeflenmiştir. Sinemanın özgür anlatım teknikleri ve yaratıcı tasarım biçimleri, mimarlık için bir ilham kaynağı oluşturmaktadır. Özellikle bilim-kurgu türünde, geleneksel mekân algıları aşılmış ve yenilikçi tasarımlar öngörülmüştür. Modernizm etkisi ile çekilen Playtime filmindeki gelecek öngörüsünün büyük oranda gerçekleştiği görülmektedir. Bu bağlamda çağdaş mimari akımın hâkim olduğu 2000'lerden itibaren dikkat çeken üç film seçilmiş ve gelecek mekân-teknoloji öngörüleri incelenmiştir. Azınlık Raporu, Blade Runner 2049 ve 2022 yılında çekilen The Peripheral dizisi göstergebilim yöntemiyle analiz edilmiştir. İnceleme; mimari ve form, mekân ve sosyal yaşam ilişkisi ile gelecek öngörüleri olmak üzere üç başlıkta yürütülmüştür. Bulgular sinemanın esnek tasarım imkânı ve görselleştirme gücü sayesinde, mimarlık disiplinine ilham olacak yenilikçi fikirler sunduğunu ortaya koymaktadır. İncelenen üç eserdeki mekân tasvirleri, yalnızca fiziksel yapıların değil, aynı zamanda teknolojik entegrasyon ve sosyal etkileşim biçimlerinin gelecekte nasıl şekillenebileceğine dair önemli ipuçları sunmaktadır.

Anahtar kelimeler: *Modern mimari, çağdaş mimari, kentsel tasarım, kent imgesi, görsel sanatlar.*

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1. Introduction

It can be said that architecture is the foremost profession intertwined with our living spaces. Cinema, on the other hand, often exaggerates or dramatizes what is happening in our lives and presents it from a different perspective. This is the starting point of the relationship between space and architecture. In every experience in their lives, human beings are in a relationship with their environment and space.

The design process in architecture starts with an abstract idea and turns into a tangible work with the help of sketches. Each line drawn has meaning and these parts, which are meaningful on their own, create an aesthetic whole at the end of the process. In the same way, cinema starts with an abstract main idea. Separately shot scenes, each meaningful in itself, become a whole work with montage at the end of the shooting. The architect's and director's view of life, lifestyle and aesthetic sensibilities shape the identity of the final work (Güzer, 2023).

Cinema has a free field of action as it deals with places and events in a fictional framework. It can disrupt and change everything that exists and produce completely different results. This freedom also affects the relationship between cinema and architecture. Space has an important place in cinema. In addition to being only a background, it affects the atmosphere of the environment and the way of expression (Ek Bektaş, 2017). Lighting effects, space size, dimensions, form, color preferences, and furniture choices are among the many factors that change the atmosphere. A visual language where physical rules are not definitely valid is used, physical laws can be defied, altered or entirely disregarded (Kayaalp & Örmecioğlu, 2022). In cinema, with the support of unrestricted imagination, it can reveal architectural and spatial designs that are not currently possible in the real world. Especially in science fiction, space setup is very strong. It transforms existing spaces, distorts and redesigns them, and offers the audience entirely new spaces from a different perspective (Erbay, Şahiner Tufan & Konakoğlu, 2017).

Periodic developments contribute to the evolution of architectural works. New technologies and methods are reflected in architectural works. These changes affect not only architecture but also other disciplines, such as cinema. Therefore, this study was created utilizing both disciplines to examine how the space designs of the future will be. It is a matter of curiosity how technologies will be integrated into spaces in the coming days. For this reason, cinema, which makes predictions about the future, was utilized. Architecture, which has always been a part of our lives, and visual narrative techniques, which are now indispensable, have been chosen as the subject of the study. With its creative freedom and reliance on architecture in narration, cinema can offer spatial predictions. The 1962 movie Playtime, telling the story of the present day although set in an unspecified time, inspired the idea that future space descriptions can be anticipated. Filmed in the mid-20th century, the movie accurately envisioned a city view very similar to today's urban environment. Its accurate predictions suggested that a similar approach can be applied to contemporary movies. Thus, the study hypothesizes that ''the future of urban, architectural, and interior design will be shaped by technological advancements and digital transformation, with the relationship between architecture and cinema becoming increasingly significant in this future design foresight.'' Within this framework, Inspired by Playtime, which is examined under the theme of modern architecture and whose future predictions have largely come true, The Peripheral series and the films Minority Report and Blade Runner 2049 are analyzed within the context of contemporary architecture using the social indicator method.

2. Material and Method

The aim of the study is to evaluate the future predictions in the movies from today's perspective, based on films that once projected the present. Since movies are not constrained by physical and perceptual reality, they can generate ideas freely. These ideas, which are visualized and presented to the audience, are a source of inspiration for many designers. Thanks to these inspirations, it is possible to predict the future, even if it remains uncertain in reality. Although the future cannot be predicted precisely in detail, it is an undeniable fact that it offers us a conceptual framework. Based on these evaluations, it may be possible to offer predictions about how our living spaces, which are inseparable parts of us, may be shaped in the future. For this reason, the settings of the films included in the study were analyzed. In addition to the predictions regarding the architectural forms and styles of the spaces,

their connection with technology was also analyzed. Additionally, the influence of these locations on the characters were evaluated in the context of social structure. The study suggests that the social and psychological factors effect architectural spaces. The study also covers the presence of the predicted future technologies in today's world, as well as how these technologies are reflected in the spaces.

The study aims to envision the spaces of the future through cinema. The flexible nature of cinema in space design can offer inspiration to designers. Especially in science fiction movies, the spaces are often portrayed as being different from daily life. Films with traces of modern architecture and contemporary architecture, which were chosen as key examples of their respective periods, were selected for analysis. The movie Playtime, bearing the traces of modern architecture, presents a world where this movement, which was prevalent in its time, dominates the urban landscape in the future. The works The Peripheral, Blade Runner and Minority Report, exhibiting traces of contemporary architecture and predicting the future, were selected for analysis. The selected works were analyzed with the visual analysis method inspired by Barthes' analysis approach. This method states that visuals should be interpreted in the process of transmission and should contain specific representations and messages. In other words, it involves conveying a message to the audience through visuals. Here, it can be explained as what the work shows, what the message it wants to give is and for whom it presents these messages. The flow of the film is stopped and its details are analyzed. The method, which aims to discover the third, i.e. the hidden meaning, investigates the message intended to be given to the audience (Lauridsen, 1988). The visuals presented in this study are intended solely for academic use. Owing to copyright considerations, the original scenes from the works were not used directly; rather, they were recreated as illustrations using artificial intelligence.

In the study, the films are analyzed under three sub-headings: Architecture and Form, Relationship between Space and Social Life and Future Foresight. In the first context, the city and architectural depictions in the works were examined. The city envisioned in the film differently from the present day and the architectural elements that attract attention were analyzed. In other words, what is shown to the audience was evaluated. The Relationship between Space and Social Life is examined in the second context. Within the framework of the main fiction in which the work develops, how the future predictions of architecture are reflected on the characters was observed. Whether it contains a criticism or not, and the relationship established between the environment and the user were analyzed. The third and final context examines what is presented to the audience as future predictions. The predictions, different from today's world, presented in the fields of architecture, technology, etc. were observed. During analyses, attention was paid to whether the works suggest solutions for today's problems. At the end of the examination of each movie, today's developments and their envisioned future depictions were interpreted. Finally, all findings were evaluated and a conclusion was reached.

3. Findings and Discussion

3.1. Modern Architecture

There are different ideas about the beginning of modernism. The architectural historian Hitchcock considered the end of Gothic style as the beginning of modernism but later argued that it could not mark the starting date of modern architecture. Art historian Scully and architectural historian Frampton stated that modern architecture began with the Industrial Revolution. Jancks, a landscape architect and architectural historian, sees modern architecture as a comprehensive movement including the 20th century developments. The Industrial Revolution is widely regarded as the starting point of modern architecture. However, from a broader perspective, modern architecture can be viewed as the evolution of developments from the Middle Ages to the present day (Aslanoğlu, 1988). Although the shift away from Gothic architecture in the early period of modern architecture was not an obvious development, an aesthetic break occurred. By the late 18th century, exhibitions and fairs that emerged with the increasing use of new materials such as metal and glass, played a crucial role in the development of modern architecture. The modern architecture of this period has more in common with contemporary architecture than with other styles of its time (Hitchcock & Johnson, 1932). Modernism, an attempt to search for innovation, aimed to develop a style distinct from the past. Changes in human habits and behaviours due to the Industrial Revolution contributed to this pursuit.

The desire to reveal the new and different, remains to be a universal and timeless impulse. While the stylistic classifications may change over time, they will always exist in order to meet the expectations by taking advantage of the developments of its era (Güzer, 2007). Mies van der Rohe (1924) emphasized that all architecture is linked to its time and cannot be considered separately from its era. He stated that the nature of architecture is to reflect its era into the spaces. Gropius (1965) argued that the historical style should no longer be replicated. He stated that by experimenting with new methods and simplified forms, they sought for a style to reflect their era. The change that started with factories, train stations, exhibition halls and fair buildings played a crucial role in laying the foundations of modern architecture. The idea that architecture should be completely functional has evolved over time and prepared the stage for late modernism (Roth, 1993). Since it revealed the most significant break from previous movements and emphasized simplicity, modern architecture took time to establish a distinct identity. Le Courbusier, one of the pioneers of the movement, outlined five principles that reveal the general outlines of modern architecture: pilotis, roof gardens, open plans, free facades, and horizontal windows (Le Corbusier, 1999).

The modern approach, which prioritizes form and function, has a simple and clear manner. Its ability to integrate technological developments rapidly also helps reduce costs. In this way, the easy accessibility of high-quality design has also contributed modernism to become one of the pioneering movements (Özkan & Öztürk, 2023).One of the disciplines influenced by modernism is cinema. With the emergence of structures that were unimaginable for their time, it has shown that the boundaries of ideas about the future have been erased. Since spaces are an important factor in cinema, it benefits from architecture. With the effect of modernization, it has started to envision the future through utopian ideas, and in turn inspire architecture (Kayaalp & Örmecioğlu, 2022). The movie Playtime was shot in 1967 and depicts a futuristic era dominated by modern architecture. The reason for the selection of the work analyzed with social indicator method is that it offers insights about how modern architecture, which was at its peak during the time of the film's production, will be reflected in the future.

3.1.1. Playtime (1967)

The 1967 film Playtime reflects director Tati's perspective on modern architecture and emerging technology. Instead of specifying a specific time period, the film defines its setting broadly as the "modern times". The story takes place in a near-future version of Paris, consisting of buildings lacking a specific identity, constructed in a universal style (Moon, 2018). The spaces highly resemble the futuristic visions depicted by Le Corbusier and Mis van der Rohe, the pioneers of modernism. The presence of photographs of the two great designers in the waiting room supports this opinion. The general atmosphere is dominated by the shades of green, blue and white. As seen in Figure 1, when we look from the 1967 vision of the future to the present (2024), we find out that the spaces are quite similar to today's buildings.

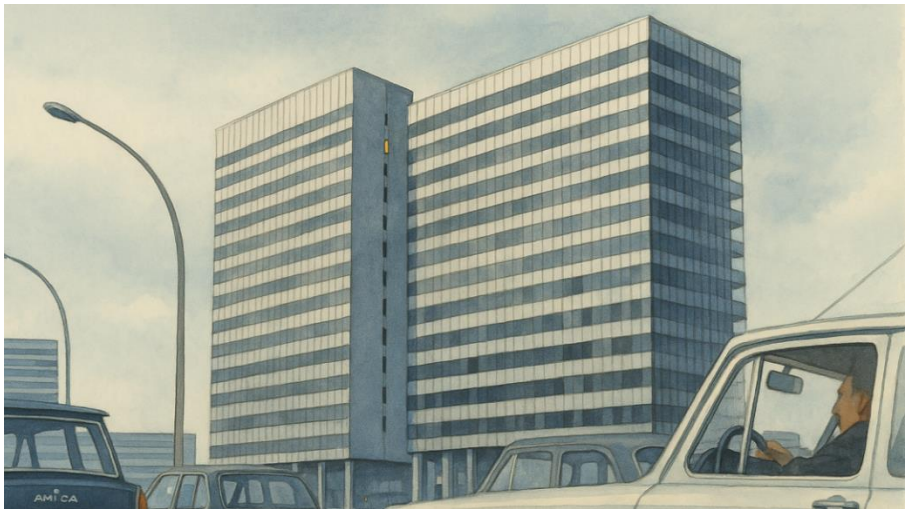

Figure 1. One of the skyscrapers in the movie.

The work is analyzed under three headings, beginning with Architecture and Form. The two-storey spaces beneath the high-rise buildings are integrated with large glass windows instead of concrete or steel walls. These spaces serve several functions such as lobbies, restaurants, markets, and pharmacies. The large glass windows especially in the spaces beneath the buildings and the residences provide a transparent transition between the street and the space. The architectural composition includes clear and precise lines, with cube and square forms being evident in both exterior and interior spaces. The designs follow a strict grid-based order. Glass and steel, the most valued materials of modernism, are frequently encountered. These materials are not only widely preferred in building exteriors but also in incorporated into interior designs. In the movie, the lobby area, which is designed with open spaces in order to be minimal and functional, offers a sense of spaciousness. As can be seen in Figure 2, the office interior consists of cube-shaped workspaces arranged in a gridal layout. A similar cube form is also seen in the interior of the fair hall. The movie consistently uses geometric forms not only in the city layout and building forms but also in the interior spaces.

Figure 2. An interior from the office scene.

When analyzing the interior of the restaurant scene, wood and marble materials are seen in addition to the steel and glass materials used throughout the movie. The decorative ornaments on the walls and ceilings are simple and geometric forms emphasizing modern art. Among all the locations seen throughout the film, it can be said that the interior of the restaurant seen in Figure 3 stands out as the most colorful and lively.

Figure 3. Interior view of the restaurant.

The residential units share a similar form, it can even be said that they are almost symmetrical. As seen through the large rectangular glass window, the interior furnishings are almost identical. The wall-mounted television is located in the middle of the wall separating the two apartments. As seen in Figure 4, in residential interiors with minimal and modern design, traditional ornaments in lighting and decorative objects stand out.

Figure 4. Residential design in the movie.

The work was also analyzed in the context of Space and Social Life to examine its social aspects. Although the clear sense of order in the designs is visually appealing, the monotonous uniformity of the spaces can be noticed easily. The functionality and uniformity of glass and steel in the movie cause the characters to constantly confuse their ways, raising the question of whether human beings need a degree of disorder and chaos alongside order. A brand-new vision that is completely different from the old one may seem aesthetically pleasing at first, yet the repetitive simplicity can lead to boring and monotonous products. An example of this is when a couple in wheelchairs appears at the beginning of the movie, leading the audience to believe that they are in a hospital, but the end of the scene reveals that the setting is actually an airport. Another instance of overly standardized design is the protagonist's confusion of almost identically designed buildings with different functions. In some scenes, how the grid-based layout creates a labyrinth-like interior can be noticed. For this reason, perhaps the designs need to find the balance between old and new and add nature between these two dynamics (Moon, 2018).

Finally, the work is analyzed within the scope of future prediction in order to examine the ideas it presents about the future. Although technological developments are depicted in the movie, they cannot be considered to be at today's level of advancement. For example as seen as Figure 5, the control panel on the wall in the lobby of the company building, and the megaphone used to notify employees of incoming visitors, are quite more complex compared to those used today. However, in today's context, it can be said that the movie refers to smart home systems, such as those for controlling lighting, temperature, and air quality.

Figure 5. Megaphone like control panel.

In general, the square and rectangular forms of the buildings offer a close approximation to today's architecture. As can be seen in the Figure 6 , today's traffic issues are predicted in the film. In addition to the widespread preference for public transportation and private cars, crowds of people are also reflected in certain scenes. Table 1 below shows the future vision depicted in the movie and its reflections in the present day.

Figure 6. A scene showing the traffic problem.

Table 1. Comparison of *Playtime* artwork's future predictions and today's reflection.

FUTURE VISION OF THE ARTWORK	TODAY'S REFLECTION
Rectangular skyscrapers are common in the cityscape.	Skyscraper architecture is the most common architectural form in urbanization today. Design forms in smart cities, which have an important place in today's agenda, are generally in the form of skyscrapers.
Steel and glass materials are frequently preferred in exterior and interior spaces.	Steel and glass are two materials widely used in architectural structures today.
The control panel in the lobby can be considered a reference to the smart systems of the future.	Smart home systems, such as those for controlling temperature, ventilation and sound resemble the smart megaphone system in the movie.

3.2. Contemporary Architecture

Botta (1986) states that architecture needs emotional reflections. He states that the international style destroys emotions, emphasizing the need for designing spaces where people can communicate emotionally. Alvar Aalto shares a similar view stating that architecture can benefit from technological developments, but in this process, it should not break its connection with human beings. He also suggests that good architecture is achieved by to harmonizing spaces with people. This perspective is actually a comprehensive functionalism beyond a technical functionalism (Aalto, 1940). The pioneers of modern architecture tried to create a new style based on functionality and saw architecture as a tool with a purely utilitarian purpose. In the early 20th century, however, the idea that architecture was more than that, that it could be both useful and a means of expressing societal values began to take hold (Roth, 1993).

Contemporary architecture represents a different form of abstraction compared to modern architecture. Modern architecture has an ideological approach as it is the first sharp point of eliminating ornamentation. Contemporary architecture, on the other hand, continues this ideology through a technical abstraction. Contemporary architecture, which proceeds in a more complex form than modern architecture, prefers to bend the line rather than clear lines. It is important that the continuing lines do not become repetitive but instead remain unique and different. Although it may seem irregular and unrelated at first glance, each section is actually in a relationship with the other (Artkan & Kandemir, 2023).

Due to today's constantly developing technology, contemporary architecture is changing at a faster pace than modern architecture. Processes such as technologization of construction techniques, development of material technology, digitalization of design processes are the main drivers of this change (Oktan & Vural, 2017).

The distorted and remarkable forms of contemporary architecture seem extraordinary. Taking advantage of this situation, film directors have leveraged these unusual forms in the representations of urban spaces, which is important for cinema. In some cases, they even create their original spaces and inspire architects and designers. As seen in the film Playtime, they can center the movements and use them almost like an actor. Playtime presents modern architecture, the trend of its time, as a modern time of the future. It combines the image of the city that may arise when modern architecture dominates an entire city with the subject of the movie and presents a future prediction. For this reason, three works have been selected to analyze the predictions of the films shot about the future in today's time when contemporary architecture dominates. The Peripheral, Blade Runner 2049 and Minority Report are important works having made an impact in today's world. At the end of the analysis, the films examined using the social indicator method are compared in terms of today's advancements and the predicted developments in the works.

3.2.1. The Peripheral (2022)

In 2016, The Peripheral, a novel by William Gibson, was adapted into a series that premiered on Prime Video in 2022. The series envisions a futuristic scenario through the use of VR headsets, which are technologies familiar in the present day. Considering the recent release of Apple Vision, the series can be regarded as a prescient glimpse into the future. The narrative revolves around a time travel journey to the year 2100, facilitated by a product resembling VR headset, set in the 2030s. As described in the work, this form of data transmission is less physical and more of mental voyage. It enables users to experience the future physically through robots integrated with artificial intelligence, while their consciousness is transferred to the target time period with headline similiar to VR glasses as seen Figure 7. Combining elements of the Metaverse and virtual reality, the series portrays a journey where the boundaries between virtual gaming worlds and tangible reality are blurred, resulting in a compelling portrayal of time travel (Allen,2022).

Figure 7. VR glasses and AI-integrated robot from the series.

When examined in terms of architecture and form, the work presents two distinct urban images. The first is Clanton, the city where the protagonist, Flynne, resides in the year 2032, and the second is London, portrayed with futuristic architectural designs in 2100. Clanton is nearly identical to contemporary urban designs. The Fisher family’s detached house, along with shops and restaurants in the city center, displays no significant deviation from present-day architectural styles. In contrast, London in 2100 is characterized by striking architectural elements that are immediately noticeable even from an aerial perspective. As can be seen in Figure 8, one of the city’s most defining features, the carbon scrubbers, resemble ancient sculptures but exhibit a contemporary aesthetic through certain structural distortions.

Figure 8. 2100 London from a bird's eye view.

These can be interpreted as both an aesthetic and functional solution to combat one of today's most pressing issues: climate change. The city does not appear significantly different from present-day London at first glance. Traditional architectural elements and forms as well as those of contemporary architecture are preserved in the outdoor spaces. The wall decorations and modern lines observed in interior spaces. As can be seen in Figure 9, the wall decorations and modern furniture choices in Lev's huge residence support this idea. The city is characterized by a hybrid layout, where skyscrapers interspersed with traditional buildings coexist alongside eccentrically designed carbon scrubbers. Additionally, as can be seen Figure 10 streets are equipped with blinking digital arrows projected above the roads, indicating directions for vehicles—an insight into the city's advanced technological infrastructure.

Figure 9. The character Lev and his living space.

Figure 10. London in 2100, an example of a transportation route with digital infrastructure.

When examining the story in the context of Space and Social Life, both the positive and negative aspects of technology's influence on humans are highlighted. In the highly secure London of 2100, which is made possible by advanced technology, the erosion of privacy is evident. Furthermore, the development of data transmission technologies leads to uncontrollable chains of events. The

characters, driven by their personal interests, use these technologies to intervene in the past, which they refer to as "root time." The series portrays how, when humans gain power, they can exploit it for their own benefit through the assistance of technology. In the story, the architectural framework facilitates the characters' lives. Digital arrows indicating the direction of traffic on transportation routes support this idea. Moreover, in one section, it is revealed that while the entire city has not been fully developed, the ruined parts are filtered through brain chips, presenting a vision of an orderly urban layout. This may be due to humans' inherent need for a constructed and aesthetically pleasing visual environment. Although the characters are aware that certain areas of the city are in ruins, they choose to filter these areas out, opting for an image of the built environment.

Lastly, the work, focusing heavily on various technologies, is approached as a futuristic projection. In 2032, closer to the present day, notable features include the widespread use of robot vacuums and VR headsets. Additionally, 3D printing technologies, which are becoming more popular today, are also highlighted. For instance, the protagonist, Flynne, works in a 3D printer market, where she is seen ordering a variety of products, from shoes to cake decorations, in the early episodes. By 2100, in addition to robots operating with artificial intelligence, humans use humanoid robots, called peripherals, which are controlled through data transmission technology.

In architectural terms, the digitally marked roads that indicate directions in the city represent the most plausible projection of current technology. Furthermore, technologies that can be considered advanced today, such as retinal scanning for opening secret doors, are widely available for public use. The carbon scrubbers in the form of sculptures are central to the city's design and as can be seen Figure 11 bear resemblance to the works of contemporary artists like Anthony Gormley and Han-Hsu Tung, who reflect a pixelated sculpture style.

Figure 11. Anthoney Gormley "Stand'' Artifact (Gormley, 2023), Han Hsu Tung "Sunset'' Artifact (Hsu-Tung, 2022)

The concept of virtual space, which is also mentioned in the work, contributes to the transparency of the transition between spaces and the integration of technological developments with design. It reveals a variety of different spaces that we can call physical, virtual and transitional spaces. Based on this, it can be said that it can push the limits of human perception in the spaces of the future (Kavut & Tarakçı, 2023). The most important element in the work is the ability of the human mind to control a robot integrated with artificial intelligence through data transfer. This phenomenon, facilitated by VR headsets or chips implanted in human brains, represents a technology far more advanced than anything currently available. In the study emphasizing the relationship between technology and space, examining this technology allows us to anticipate potential future developments. It is seen in the series that the robots controlled by human minds need spaces, and it can be inferred that robots may require specific areas for storage. Furthermore, it is clear that when interacting with robots, the human mind and body, being separate entities, will require protection. Therefore, spaces may need to be designed with special encryption or protective measures. However, such designs may not be feasible for all income levels. The internet cafes, which were popular in the 1990s as gathering spots for young people, are gradually transforming into spaces for gaming, where PlayStation or VR headsets are used. Based on this trend, it can be projected that people from middle- or lower-income brackets may opt

for these cafes to access this technology. Table 2 below shows the future vision depicted in the series and its reflections in the present day.

Table 2. Comparison of The Peripheral's future predictions and today's reflection.

FUTURE VISION OF THE ARTWORK	TODAY'S REFLECTION
Robots operating with artificial intelligence. Humanoid robots called peripherals that humans can control with their consciousness mind transfer.	Robots operating with artificial intelligence have begun to emerge today. However, robots that can be controlled by human minds, as depicted in the work, do not exist yet.
Ancient-modern sculptural forms that function as carbon scrubbers.	Wind turbines, used to generate clean energy, are already in use.
A city design that preserves tradition while blending with modern elements.	Styles that combine the old and the new are prominent today.
Chips implanted in humans' minds. Additionally, technological advancements in data transmission enable time travel.	Experiments involving the implantation of chips in animals' brains have been conducted. Additionally, last year, public announcements were made regarding the approval to implant chips into the human brain. However, the time travel technology portrayed in the work has not been realized in the present yet.

3.2.2. Blade Runner 2049 (2017)

Blade Runner 2049 is the sequel to the 1982 film Blade Runner 2019. The work depicts a future in which bioengineering has reached extraordinary levels. The "more human than human" design of the replicants makes it difficult to distinguish them from humans. As a result, the plot revolves around the question of what it means to be human. Architecturally, the film features a grand cityscape dominated by a dark atmosphere. As can be seen in Figure 12 in terms of architecture and form, the city initially presents a uniform, grid-like, and almost contiguous structure. The neon brand signs on the buildings illuminate the narrow streets to some extent but also contribute to a chaotic visual. In certain areas, there are landing pads on the rooftops of buildings, where flying cars can park. The most prominent and striking structure in the city is the corporate building where the replicants are produced. The Wallace Corporation building bears resemblance to ancient temples. The structure, in the form of an incomplete triangle, exudes brutal sharpness. The building employs a consistent material design and utilizes light plays to create a dynamic form. As can be seen in Figure 13, the interior spaces show a clear minimalism, with no excessive decoration.

Figure 12. A view of the city streets.

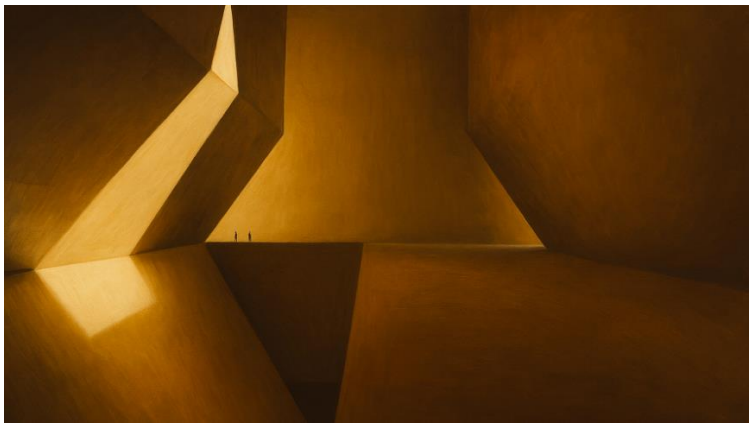

Figure 13. Part of the Wallace Corporation interior.

The same minimalism is evident in the interior design of the residences. In the protagonist's functional studio apartment, there are no unnecessary furniture or objects. As can be seen in Figure 14, the cold atmosphere is palpable in almost all of the buildings and interiors. Traditional forms or ornamentation are only encountered in the ruins of Las Vegas, a location the protagonist visits during a mission. As seen Figure 15, in the film, the only structure that features arches and composite-columned pillars is the building the protagonist enters in the ruins. The film clearly conveys to the audience that traditional forms have become obsolete.

Figure 14. Residential interior.

Figure 15. Building in the ruins of Las Vegas.

In terms of Space and Social Life, it can be noted that the film projects a very dark future. Despite the advanced level of technology, it is observed that the characters in the film lack the most human emotions, such as love and happiness. The high level of poverty, despite significant advancements, presents a clear contradiction. The characters' unhappiness seems to be embedded in the very structures of the environment, leading to the emergence of an architecture that is entirely functional

and devoid of ornamentation. Even at the center where as seen Figure 16 the replicants are designed and produced, there is no trace of decoration or embellishment; everything is designed in a style that echoes the motto "less is more".

Figure16. One of the replicants.

When examining the work in the context of futuristic projections, we can draw a connection with the increasing number of robots resembling humans today. Seen in Figure 17, the recent introduction of Elon Musk's Optimus Gen 2, which moves almost as fluidly as a human, is thought-provoking. In an era where multiple advancements spread rapidly, the widespread availability of artificial intelligence also provides companies with a free testing environment. The distorted urban structures in the work bear a striking resemblance to low-income cities and regions in today's world. Table 3 below shows the future vision depicted in the work and its reflections in the present day.

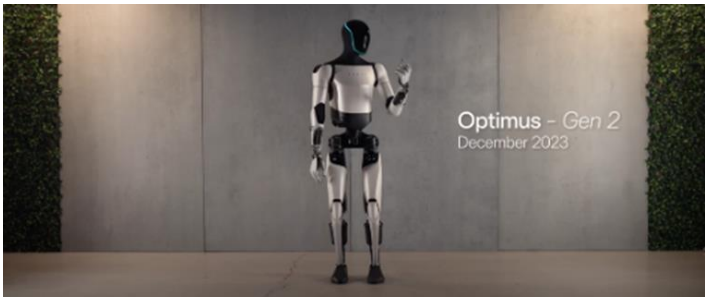

Figure 17. The Optimus Gen 2 robot (Tesla, 2023)

Table 3. Comparison of Blade Runner 2049's future predictions and today's reflection.

FUTURE VISION OF THE ARTWORK	TODAY'S REFLECTION
Replicants designed to be indistinguishable from humans.	Robot technology capable of fluid movement like a human exists today, but robots are not indistinguishable from humans yet.
An architectural style with minimal and clear forms, free from tradition and ornamentation.	An eclectic style combining modern and traditional elements is present. A complete abandonment of any architectural form has not been observed yet.
High landing pads for flying cars in certain areas.	Today, skyscrapers have helicopter pads on their rooftops.
The city image in the work features narrow streets and distorted urbanization.	Distorted and irregular urbanization exists in low-income areas today. Urban renewal projects aim to build more organized cities by transforming low-income neighborhoods. However, debates persist over the relationship of belonging between low-income people and the transformed living spaces.

3.2.3. Minority Report (2002)

Released in the early 2000s, Minority Report is set in Washington, D.C. in the year 2054. It is a science fiction film adapted from Philip K. Dick's novel. The work revolves around a system in which criminals are predicted by "precogs" (seers) using technology, in order to prevent crimes before they happen, presenting a vision of a crime-free future. In terms of architecture and form, the first impression of the city is the high-rise skyscrapers and the transportation networks connecting them through bridges as seen in Figure 18.

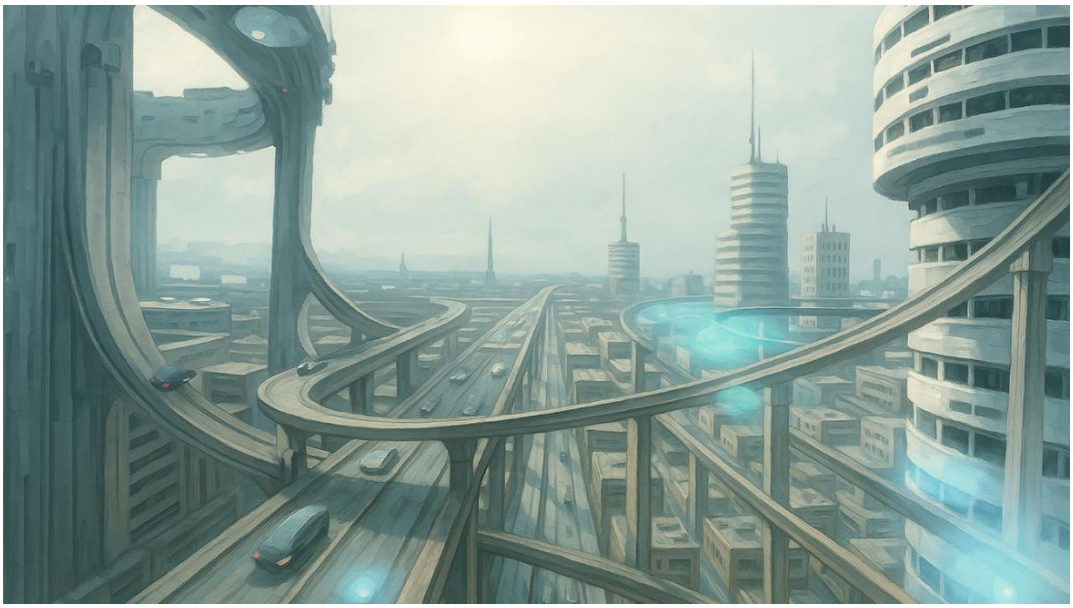

Figure 18. A bird's eye view of the city.

Unlike today, both horizontal and vertical transportation are possible. In some buildings, the exteriors of skyscrapers are even used as transportation routes. Due to the unique layout of the streets, the transportation vehicles are designed more flexibly, differing from today's models. This could serve as inspiration for the growing problem of traffic as seen in Figure 19. In recent years, there has been a trend toward planning "smart cities" where the distance from a person's home to their needs is limited to a 15-minute walk. These cities aim to eliminate time lost in traffic by planning neighborhoods with the goal of minimizing commuting time.

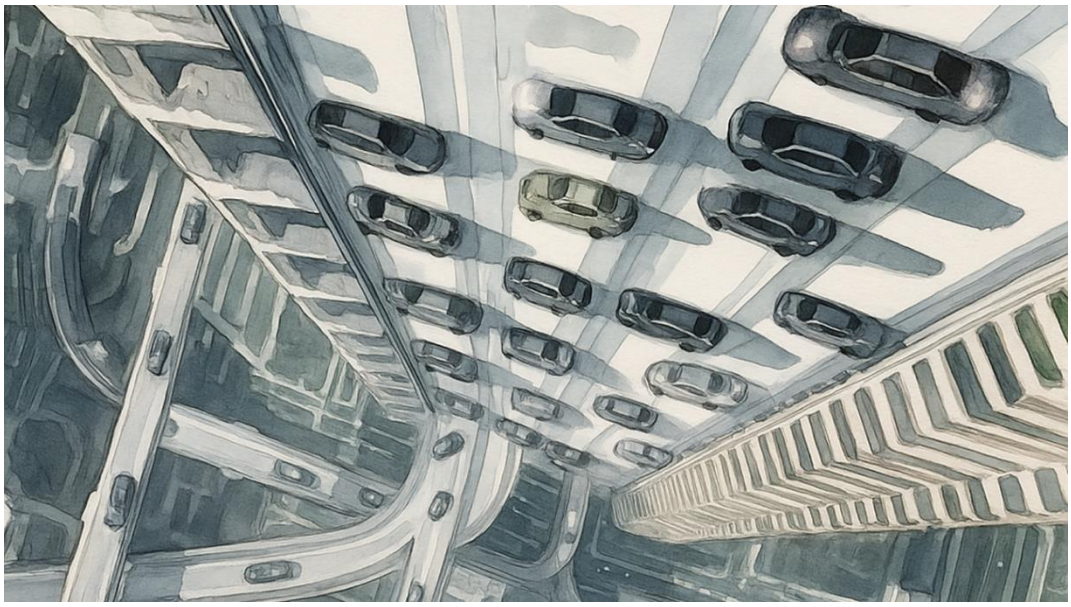

Figure 19. Transportation routes on skyscrapers.

The colorless and fluid forms of the buildings continue not only on the facades but also in some interior spaces. In shopping centers, the character's workspaces feature fluid and organic forms. Alongside modern forms, traditional ornamentation is also visible in high-income areas. In the scene where the character visits the office of her superior, the carvings on the wall and the wooden materials used in the furniture stand out. The combination of simplification and fluid forms alongside the persistence of ornamentation is intriguing. The shapes reminding the past, when compared to the fluid and pristine forms, may create a sense of comfort in people, as they evoke a sense of lived experience. In the film, it seems that lower or middle-income people live in more modern areas, while higher-income individuals prefer spaces that combine modern with traditional and ornate elements. This choice might reflect an attempt to emphasize the value of ornamentation and tradition as seen in Figure 20.

Figure 20. A view of a location with historical textures in the movie and a view of the office workspace.

Within the context of Space and Social Life, a high level of security in the city is observed. One of the intriguing aspects of the film is that people's thoughts and emotions can be detected, even if they haven't taken any action. Under the guise of societal security, the rights of individuals are disregarded, and we see that even innocent people can be accused of crimes within the system. Additionally, the fact that the system can be manipulated reveals that technology can be used as a threat. The film illustrates how technology can be employed to control people rather than being used for the benefit of humanity, highlighting how much technology can influence the balance of the world. In terms of city forecasts, the advanced transportation networks seem to have eradicated time and traffic problems. However, in one scene, the character’s ability to jump over vehicles after exiting their car provides a strong narrative showing that even in a secure city, there can be vulnerabilities in any system.

When examined from the perspective of future predictions, the transportation factor stands out. The idea of combining structures with transportation routes is thought-provoking. A parallel concept to this can be seen in a building developed by Porsche Design and Dezer Development in Miami, where users can use a car elevator to take their car directly to their apartments and park it next to their living space (Howarth, 2013). Figure 21 shows the interior of the building.

Figure 21. Porsche Miami Design Tower interior visualization (Howarth, 2013)

As seen in Figure 22, the advertisements tailored to individuals' interests in shopping malls in the movie are similar to the targeted ads we see today on platforms like Instagram and Google. It doesn’t seem too far-fetched that, in the near future, advertisements might appear in the form of holograms inside spaces, just like those in the film. The evolving technology impacting the design of our living spaces can also be observed through the film.

Figure 22. Visual of the shopping mall hologram advertising.

The mechanism for detecting crimes in the story, developed through the partnership between seers and technology, is presented to the viewer as an advanced method. In the present day, a similar approach can be found at Neko Health, which was co-founded by the creator of Spotify. Neko Health utilizes an AI-assisted scanning method to detect diseases and provide early diagnosis. The device has the ability to detect potential health issues in the human body in advance. With a single scan completed in less than 15 minutes, the system can capture high-quality health data. Currently, nearly 20,000 people are on the waiting list for appointments (Neko Health, 2024). Table 4 below shows the future vision depicted in the work and its reflections in the present day.

Table 4. Comparison of Minority Report artwork future predictions and today's reflection.

FUTURE VISION OF THE ARTWORK	TODAY'S REFLECTION
Architectural structures are designed in a form that combines transportation routes.	In today's world, alongside 15-minute Smart City projects, different projects like skyscrapers with car elevators have started to emerge.
In the living spaces of high-income individuals, traditional and ornamental forms are seen, while modern and clear forms dominate the living spaces of middle and low-income individuals.	An eclectic style dominates today. Interior spaces combine simplicity with ornamental or traditional products. Additionally, both ornamental and minimalist design movements are visible across all income levels.
Technology has found its place in interior spaces. Holographic advertisements or devices with different screens replacing computers are integrated into the spaces.	In today's smart cities, spaces are also being designated for devices such as robot vacuums, which have found their place in apartments or detached houses. The increase in the use of these products will lead to the emergence of more advanced designs.

4. Conclusion and Suggestions

The concept of space is a common ground between cinema and architecture. Both disciplines present space to people. Sometimes architecture inspires cinema, and sometimes cinema inspires architecture. As the world continues to develop, architecture looks at how it can use these changes within its own discipline. Cinema, influenced by the trends of its time, presents future predictions through its imagination.

Playtime predicted a future dominated by modern architecture, influenced by the modernism of its time. Today, skyscrapers and modern furniture are still highly favored. In The Peripheral, artificial intelligence robots might have seemed like a distant concept a few years ago, but today we can see the presentation of increasingly advanced robots. Additionally, products like robot vacuums, though small, have started to find their place in our homes. In Minority Report, personalized hologram advertisements appearing in spaces reflect how Instagram and Google ads now target us.

Cinema, unburdened by the limitations of physical rules, has the ability to design freely, offering a space for the creation of ideas. These ideas can inspire not only the field of architecture but also many other disciplines. Through cinema, we can anticipate the designs of the future. Predicting the future can help us create pioneering designs. By analyzing the stylistic searches of the past, we can shorten the time it takes to reach results and accelerate the processes. Theoretical ideas can be tested and materialized, eventually finding their place in our lives. The level of change in today's world is much higher compared to previous eras. Therefore, the methods used in design or the sources of inspiration sought are more strongly interconnected across different disciplines today. An open-minded director can inspire an architect, just as an architect can inspire a director.

Upon examining the results of the film analyses, we observe both similarities and differences in how each movie projects the future. One of the most striking aspects of The Peripheral, which portrays the future of London, is the image of a city where historical buildings coexist with newly constructed ones. Despite the post-catastrophe reconstruction, it is evident that the forms from the ancient period have not been completely abandoned. This may have been intended to remind the new generation of inhabitants about their roots, as history evokes a sense of lived experience. In the interior spaces, while ornate walls and decorative objects are present, traces of modern design are also observed in the furniture. Perhaps the most notable feature of the work is the integration of historical forms with technology in its design.

The architectural style in Blade Runner 2049 consists of clear and massive forms. Even in the interior spaces, no unnecessary decoration or objects can be found. The city image, with its entirely industrial and minimalist atmosphere, is also cold and massive due to its material choices. The only example of historical style in the work is found in a building amidst abandoned ruins. The work uses this method to indicate that the historical style is now a matter of past. The Wallace Corporation building initially presents an image similar to ancient times, but upon closer inspection, it is revealed that it has been simplified and transformed into a brutalist structure. The influence of an authoritarian regime on architectural structures, combined with the image of social voids that advanced technology may create, reveals the negative impacts of an increase in purely functional spaces on society. In this regard, the work emphasizes the necessity of considering not only functionality but also aesthetic and emotional needs, while placing the human at the center of future space designs.

Although produced earlier than the other two movies, Minority Report continues to offer ideas still valuable today. The most striking feature of Minority Report is the integration of transportation routes and skyscrapers into a unified design form. The overall city atmosphere is similar to today’s. Glass and metal skyscrapers cover the entire city. In interior spaces, while there are references to historical images in high-income areas, the spaces for middle and low-income groups are designed more functionally. The active use of holograms or transparent-screen-like devices in interior spaces might forecast different styles that could emerge in future interior design, driven by technological advancements. The active use of technological infrastructures, especially in interior spaces, holds critical importance in terms of personal rights and freedoms. The manipulability of such systems reveals the potential of technological elements to become threats. Therefore, the concept of privacy may need to be redefined in the future, and the creation of isolated zones within interior designs—separated from technological integration—may become necessary.

In the designs of future spaces, smart systems will play significant roles, as seen in Playtime and the other three works. Smart systems are not only present in the context of cities and buildings but have also started to be preferred in interior spaces today. It can be predicted that these systems will influence space designs as well, not only the technical areas through control systems. Despite the increasing technological developments, it is evident that we have not fully departed from historical styles. Even if historical forms are not seen throughout the city, they do appear in the ruins, possibly to suggest that accepting and developing these forms, rather than abandoning them, might lead us to better places. For this reason, styles that reinterpret the old or traditional may rise in the future. Based on another forecast from these works, it is likely that alternative transportation routes will be explored in the future. Today’s smart city examples, which are designing alternative routes for transportation,

can be seen as the beginning of this process. Advanced public transport systems, bicycle paths, and other alternatives are some of these. In addition, architectures where the relationship between buildings and roads is strong will likely to become more common.

In the spatial designs of the future, not only technology and aesthetics but also patterns of social life are expected to play a significant role. Increasing urbanization, individualization, and digitalization are transforming the ways people come together and interact. In this context, there will be a growing need for public and semi-public spaces that support social interaction. Based on the concept of virtual space explored in The Peripheral, it can be predicted that new public spaces may be constructed within virtual environments through chips expected to be integrated into the human mind. At the same time, the idea of virtual cafés—where individuals gather mentally while their physical bodies remain isolated—highlights a potential future in which such forms of social interaction become increasingly common. As social isolation becomes more prevalent in the digital age, the field of architecture is expected to produce spaces that counterbalance this trend. While cinema often envisions highly controlled, technologically dense interior environments that isolate individuals, the importance of flexible, accessible, and multifunctional communal areas designed to strengthen a sense of social belonging will become more pronounced. Designing spaces that are sensitive to social life—spaces that are inclusive and participatory—will play a fundamental role in future cities not only from a physical standpoint but also in terms of social sustainability.

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