

How does film influence perceptions of the architecture and urban landscape of the future?

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Abstract

There are distinct parallels between the professions of architecture and film, as the two subjects are intrinsically intertwined, with a deep-rooted connection dating back to the fruition of film in 1895.

The chapters of this dissertation aim to provide a detailed insight into the influence film exerts on perceptions of the future, with an in-depth exploration of the evolution of set design methods; the influence that the two professions have on one another; historical and modern interpretations of the future, as well as the cinematic depictions of the future, exhibited in the current built environment.

The research of this dissertation undertook a qualitative approach with a thorough analysis of four methods of investigation. The exploration of literature and historical sources, the examination of film, site visits, and interviews with industry professionals, were all implemented as methods by which a definitive solution could be found for the title of this work.

The findings of this dissertation allude to the severity regarding the extent of the dependent nature of the two professions of architecture and film, in addition to the depth of their interwoven history. The conclusive result achieved by the author provides a further interpretation that responds to the existing debate within this field.

Acknowledgements

My dissertation would not have been possible without the help of many people guiding me along the way.

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Introduction

The global expanse of cinema has enabled film to dominate the 21st century as one of the most influential mediums to date. The industry shares a direct affinity with architecture as the two fields exhibit a deep-rooted connection that emanates from the establishment of film. It is through this intertwined nature of the professions that film and architecture have begun to influence their subsequent counterpart. The following dissertation explores the extent of this influence in conjunction with the ramifications originating from the relationship between the two fields.

Film is often not associated with the evolution of the built environment, however, in reality, it is the driving force behind perceptions of the future of architecture and the urban landscape.

Aims and objectives

The primary aim of this dissertation is to explore the influence film exerts on perceptions of the future of architecture and the urban landscape.

The dissertation will address the following objectives:

1. To research the evolution of set design and the methods implemented
2. To further understand the intertwined nature of the professions of set design and architecture
3. To examine historic interpretations of the future in comparison to modern interpretations
4. To assess parallels between cinematic portrayals of the future and the modern urban landscape.

Methodology

The study conducted throughout this dissertation was sourced through the use of four approaches to research:

1. Literature and document sources
2. Film and media
3. Interviews with key industry professionals

4. Site visits

1. Literature and document sources

The author of this dissertation undertook a preliminary investigation regarding the development of the interpretations of the future, in which the vast expanse of alternate theories surrounding the premise of the evolution of architecture was uncovered. Through the utilisation of books, articles, and theses, an insight into the significant role of film regarding the development of interpretations of the future was made paramount.

2. Film and media

The dissertation also saw the implementation of an analytical evaluation regarding a high quantity of films that corresponded to the premise of the paper. Subsequently, the author was able to gain valuable primary insight into a catalogue of cinematic portrayals of the future that aided in the overall comparison between the modern-day topography of the urban landscape and the premonitions of futuristic films.

3. Interviews with key industry professions

The author of the dissertation undertook a total of three interviews, with Andrew Li, Brad Ricker and Joelle Rumbelow, who provided pertinent information regarding the first-hand experiences and knowledge of key professionals within the industry of set design. Andrew Li provided expertise on the constraints of CGI, Brad Ricker sourced information regarding set construction methods and Joelle Rumbelow alluded to the role of architecture within film.

A finalised list of questions for these interviewees can be found in Appendices A, B, and C.

4. Site visit

Throughout the investigative process of this dissertation, the author conducted a site visit to the Temple of Peace, situated in Cardiff. Through witnessing the real-world counterpart of a digitally augmented building depicted on screen, the author was able to experience first-hand, the impact of computer-generated imagery, and how it can drastically alter the mood, atmosphere and aesthetic of architecture in comparison to the existing structure.

Definition of set design

Referred to as scenic, stage, or theatre design, the field of set design is a fundamental cornerstone of the medium of film. The primary function of the profession is to provide the audience with context regarding the performance of the motion picture, whether that be in the form of a physical location or a time period in which the film is set. Furthermore, set design also contributes to the development of the film, providing subtext to each scene, that alludes to the themes, undertones and atmosphere of the storyline, facilitating the development of the performance¹.

Definition of the genre

Surrounding the premise of the influence film exerts against architecture, this dissertation focuses on the genre of science fiction, as this field offered the greatest affiliation with perceptions of the built future.

Defined as depicting “events that take place in the future or in other parts of the universe”², the genre of science fiction has been widely interpreted throughout its portrayals within film. A subsequently select sample was utilised throughout this dissertation, typically implementing interpretations that facilitate credible and semi-realistic depictions of architecture that has influenced perceptions of the future.

Introduction to Case Studies

Two case studies within the science fiction genre were selected for the dissertation: *Metropolis* (1927), and *Blade Runner* (1982).

The two films provide credible yet contrasting interpretations of the future, and the historic nature of both films allows for the comparison of the current urban environment with the on-screen depictions of the future.

¹ Ricker, 2023

² Collins, 2023a

Literature review

Throughout the investigation conducted by the author, several key publications provided valuable insight and assisted in furthering the development of the subject. Written by Marco Ceresa, *Shanghaied into the Future: The Asianization of the future metropolis in post Blade Runner Cinema* written in 2017, was a key work, utilised throughout the dissertation as it provided detrimental information regarding parallels between the on screen portrayals of the future and the modern-day urban landscape.

A History of Film

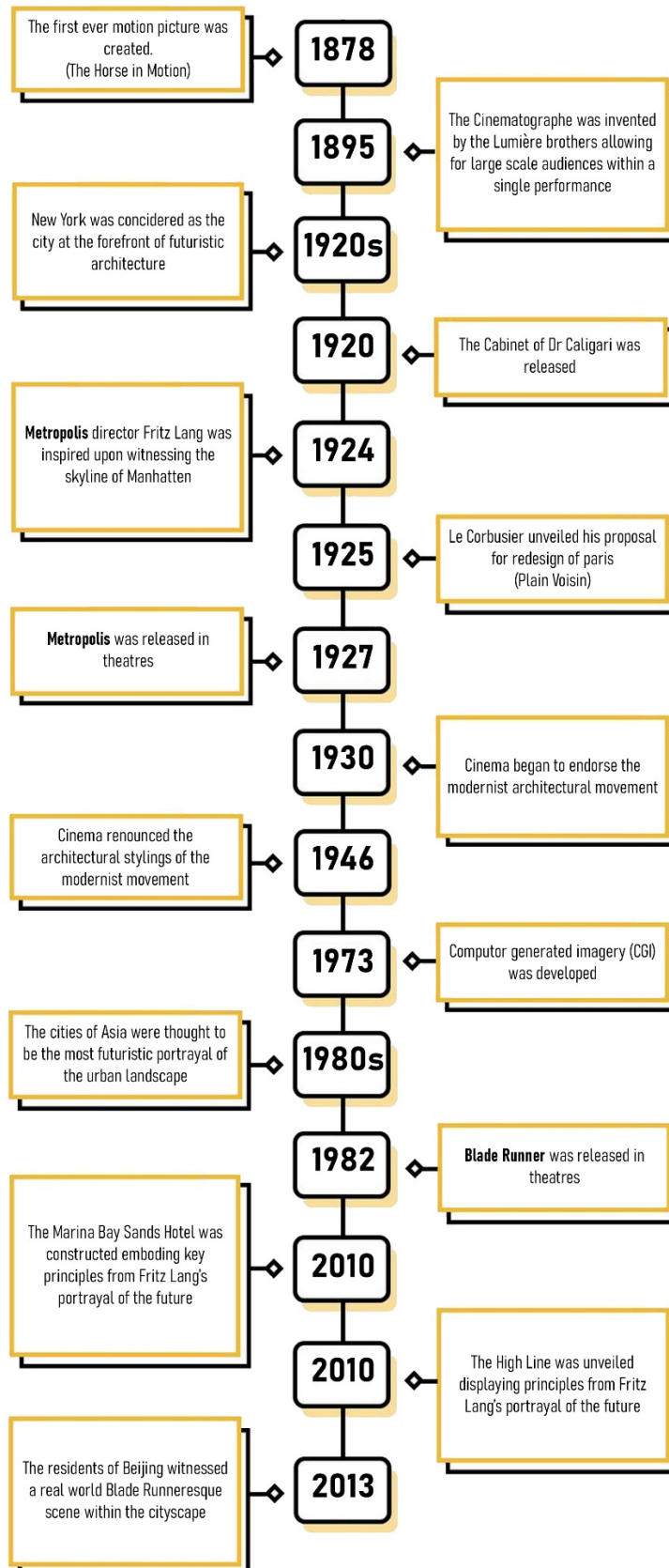


Figure 1: A history of film (Photo credit: G. Davies)

Chapter 1: The Creation of the Imagination



Figure 2: The construction of the city setting, *Metropolis* (Photo credit S. Pseno)

The modern-day affiliation between set design and film, establishes the two professions as almost indistinguishable, nonetheless, the practice of set design is a far more ancient art. Dating back to the Greek civilisation, set design was traditionally used within the theatrical industry, (Mary, 2022) however, with the emergence of motion pictures in 1895³, the profession quickly adapted to meet the requirements of the film industry.

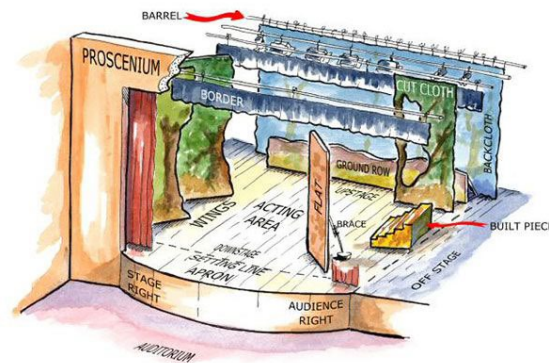


Figure 3: The illusion of stage design exposed (Photo credit: B. Larson)

Throughout the years following the establishment of the film industry, constricted by the technological advancements of the time, set design for motion pictures followed the precedent laid out by the contiguous profession of stage construction (Figure 3). However, it became apparent that set design, within a theatrical capacity, needed to adapt to fit the new medium. With the set design for theatre, the setting is typically constructed and arranged to accommodate the audience. Therefore, the spectators witness the performance from a fixed perspective in a scene depicted by the production staff. In the early years of set design for motion pictures, this fixed perspective was utilised to accommodate the static camera⁴, even though “the possibilities of the medium were not being fully explored”⁵. Subsequently, this led to the emergence of the movement of the camera throughout the space.

³ Patented by August and Louis Lumiere in 1895, the Cinematographe revolutionised the entertainment industry by creating a method in which to display motion pictures to audiences of an unprecedented scale (Martin, 2019).

⁴ Barnwell 2004

⁵ Barnwell, 2004, p.5



Figure 4: The Overlook Hotel as depicted in *The Shining* (Photo credit: IMDB)⁶



Figure 5: The illusion of the architecture exposed, *The Shining* (Photo credit: Warner Bros)

Traditionally, sets would be constructed from a painted backdrop that would depict a false perspective, to create an illusion of being in an alternate location (Mary, 2022). However, sets also “relied on visual trickery, compression ... and miniature models”⁷ (Figures 4 and 5) in order to provide a setting for films that would create an immersive experience for the audience, demonstrated with the release of *The Cabinet of Dr Caligari* in 1920. This early horror genre motion picture reimaged the boundaries of the role of set design within a scene, as it became “one of the first films to explicitly promote and internationally draw attention to the creative use of ... its innovative sets”⁸. *The Cabinet of Dr Caligari* was filmed within a glass house studio, with the surrounding environment fabricated from “almost exclusively painted backdrops”⁹. However, the movie sets, constructed by Hermann Warn, Walter Reimann and Walter Rohrig, transcend the motion picture as the exaggerated use of a false perspective, dramatized and heightened the mise en scene¹⁰, (Figures 6 and 7) to the extent of which the sets were described to be “acting as a protagonist in itself”¹¹ throughout the entirety of the film. Unbeknownst to the designers, the introduction of this method of exaggerated set design solidified *The Cabinet of Dr Caligari* as a pinnacle of early European cinema. (Bergerfelder, Harris and Street, 2007).

⁶ Warner Bros, Hawk Films and Peregrine. *The Shining* (1980)

⁷ Bergerfelder, Harris and Street, 2007, p14

⁸ Bergerfelder, Harris and Street, 2007, p32

⁹ Bergerfelder, Harris and Street, 2007, p41

¹⁰ “The arrangement of properties, scenery, etc” (Collins, 2023a)

¹¹ Baratto, 2022



Figure 6: The dramatized rooftop silhouette, *The Cabinet of Dr Caligari* (Photo credit: IMDB)¹²



Figure 7: Distorted architectural surroundings, *The Cabinet of Dr Caligari* town square (Photo credit: IMDB)¹³

As the film industry began to grow, the requirement for technological advancement within the profession of set design increased, as production staff strove to captivate the general public. However, it was not until 1973, with the inception of computer-generated imagery¹⁴ (CGI) that the real-world limitations of design became irrelevant within the virtual environment. CGI made possible scenes that could have only been imagined a decade earlier (Figure 8).

The possibilities of the digital world became endless, only limited by the budget available and the imagination of the design team, in fact, by 2000 the silver screen had already witnessed everything, from a time-travelling DMC DeLorean¹⁵ in *Back to the Future* (1985), to slow-motion bullet time in *The Matrix* (1999). However, as a relatively new concept, the film industry could not solely rely on the use of CGI alone to create a film, so the primary method of design continued to be the real physical construction of sets, with only a limited appearance of CGI. It was not until 1995, with the release of *Toy Story* (1995), that a feature film, solely reliant on computer-generated imagery was produced (Semlyen, 2010).

¹² Decla-Bioscop AG. *The Cabinet of Dr Caligari* (1927)

¹³ Decla-Bioscop AG. *The Cabinet of Dr Caligari* (1927)

¹⁴ Semlyen, 2010

¹⁵ The DMC DeLorean is a rear-engine two-passenger sports car made by the American DeLorean Motor Company in 1981. Entry was via a pair of "gull-wing doors" and the vehicle had external panels of brushed stainless steel. Production of the car was brief because of its lack of power which was out of place with the astronomical price tag, but the "DeLorean" became famous due to its involvement with the *Back to the Future* trilogy.



Figure 8: Introduction of wireframe graphics CGI in cinema (depicted on the screen), 1977, *Star Wars: Episode IV* (Photo credit: K. Baver and J. Green)¹⁶

The use of CGI has become a cornerstone within set design, but there is a vast contrast between the modern appearance of CGI and that from 1973, with improvements in the quality, efficiency and reality of the output of the technology, which is being continuously developed to maximise the immersive experience for the general audience. Furthermore, despite the increased frequency of its appearance within the film industry, as the use of CGI is dependent on the genre, the script and the specific plot of the movie, the film industry is, to a certain degree, still heavily reliant on the use of physical set construction.

The hierarchy of set design

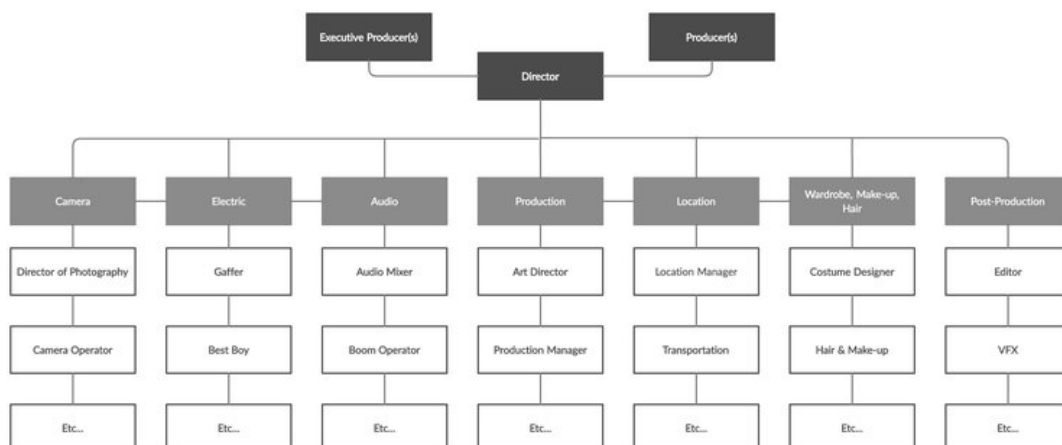


Figure 9: The fundamental hierarchy of set design (Photo credit: J. Aldredge)

¹⁶ Lucasfilm. *Star Wars: Episode IV- A New Hope* (1977)

Key individuals involved in the creation of a film include, the director, production designer and the producer (Figure 9). The process starts with the script, as the basis for the entire film, which advises the production department¹⁷ on what core settings are required. Within the initial stages of design, the director works closely with the art department, depicting their vision to the production designer and concept illustrators who design according to the director's view. Throughout the process, the director can have a varying degree of contribution, with certain directors becoming heavily involved, such as Ridley Scott, who uses a series of "Ridleygrams" to indicate both scene, through a vivid sketch, and movement through the use of arrows"¹⁸, as depicted in Figure 10.

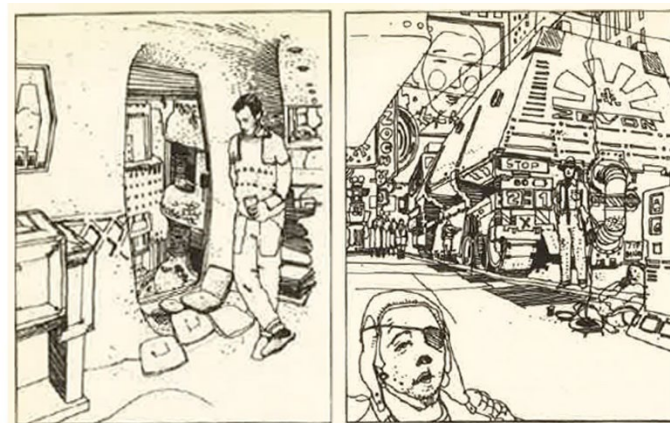


Figure 10: *Blade Runner* concept drawings, 'Ridleygrams' (Photo credit: P. Sammon)

Following this concept phase, the film's required locations are devised and categorised on the basis of which settings require physical construction and which settings can be created within the virtual space, depending on the practicality, necessity and constructability, in addition to the budget that is allocated by the producer. It is only then that the physical and virtual set construction can proceed, with the set designers focusing on real construction, and the special effects artists working on the digital design. Furthermore, throughout this process, external consultants can be employed to assist the production team with their design (Rumbelow, 2023). In conversation with Joelle Rumbellow, when describing her experience on the production of *Brave New World* (2020), stated, "they actually went to an architecture firm and employed architects"¹⁹. The use of external professionals can help to improve the quality of work produced, and in this instance, helped to create a more realistic and more authentic portrayal of the fictional environment.

¹⁷ A structured hierarchy with in which all members strive to achieve the artistic approach of the director.

¹⁸ Parrill, 2011, p.35

¹⁹ Rumbelow, 2023

Methods of set construction

The commonplace practice of using existing landscape, architecture and scenery is utilised across all genres of film. As depicted in Figures 11 and 12, existing locations can be modified, to an extent, in order to provide a setting as envisioned by the production department. The use of an existing setting can provide a cost-effective and sustainable background to a scene. In an interview with art director Brad Ricker, he stated, “I always say to people let’s not build anything that already exists ... spend the money elsewhere”²⁰. However, despite the financial and environmental benefits, the use of the existing structures comes with its own limitations, such as location access, lighting, the adaptability of the site as well as the availability of the site to film. The shorter and less demanding the scene, the easier it becomes to procure a suitable environment²¹. Nevertheless, “There is a limited amount to what you can do on location”²².



Figure 11: Existing bank filming location before, *Spider-Man: Homecoming* (Photo credit: B. Ricker)



Figure 12: Existing bank filming location after, *Spider-Man: Homecoming* (Photo credit: B. Ricker)

An alternate approach to set design is through the use of constructing sets, which can range from the construction of a hotel corridor, depicted in *Inception* (2010) (Figure 13), to the creation of an entire street, as demonstrated in the production of *Blade Runner* (1982) (Figure 14). Furthermore, these sets can be meticulously created to the most minuscule detail, at the request of the production team, whilst simultaneously accommodating lighting rigs, audio appliances and the moving camera. Furthermore, whilst the physical sets are constrained to the production studio, the environment depicted can be located anywhere within the realms of

²⁰ Ricker, 2023

²¹ Ricker, 2023

²² Ricker, 2023

the imagination. However, set construction, similar to the use of an existing location, is constrained by gravity, structural stability and additional limitations of real-world design. Additionally, the process of set construction is often viewed as being created “for on-screen effect rather than for material solidity or longevity”²³, which has led to an environment in which production studios “destroy sets upon the completion of the product”²⁴. Implications dictate that set construction can be viewed upon as non-sustainable, and whilst there is evidence of sets and materials being reused, it can be stated that not all settings are interchangeable (Ricker, 2023). One example in which properties (props) were recycled within the industry is demonstrated by *Blade Runner* production designer, Lawrence Paull²⁵, who stated, “That kicking cowgirl, for instance? She came directly to us from *One From the Heart*”.



Figure 13: Rotating corridor, *Inception*
(Photo credit: IMDB)²⁶

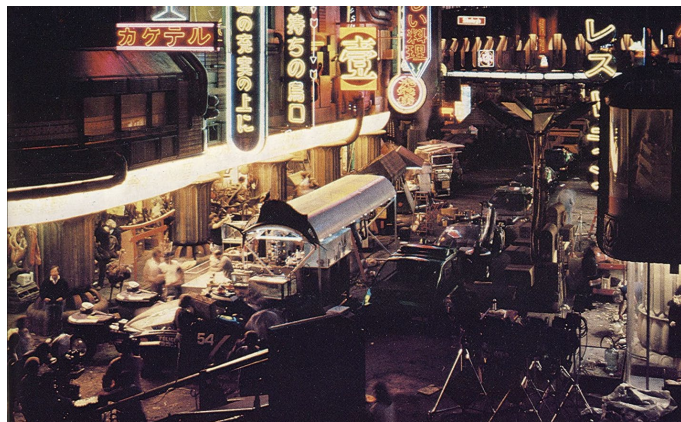


Figure 14: *Blade Runner* behind the scenes street setting (Photo credit: IMDB)

There are multiple ways in which CGI can be utilised within film, for example, the augmentation of the existing, as shown in Figures 15 and 16, or the creation of an entirely new world build, as depicted in Figure 17.

²³ Bergerfelder, Harris and Street, 2007, p14

²⁴ Bergerfelder, Harris and Street, 2007, p14

²⁵ 1982, quoted in Sammon, 1996, pp.98-99

²⁶ Warner Bros, Legendary Entertainment and Syncopy. *Inception* (2010)



Figure 15: Temple of Peace, Cardiff
(Photo credit: G. Davies)



Figure 16: Digitally altered Temple of Peace as an apartment block, *His Dark Materials* (Photo credit: M. Brown)²⁷



Figure 17: Fictional CGI world build, *Brave New World* (Photo credit: NBC Universal)²⁸

CGI creates an environment in which design possesses no limitations of real-world construction, therefore, it can be used to create cities and architecture of the imagination and provide a greater understanding of how it can be adapted and constructed within the real world. However, there are constraints within the process of utilising CGI as a means of set design. In an interview, art director Andrew Li revealed that “time and cost are two main reasons why [CGI is not] not widely adopted throughout the film industry, as limited financial budget and design deadlines render the process unobtainable within specific productions” (2022). Li went on to state that an additional limitation of the use of CGI within set design was

²⁷ Anton, Bad Wolf Studios and BBC. *His Dark Materials* (2019-2022)

²⁸ Amblin Television, NBCUniversal Content Studios and Universal Content Productions. *Brave New World* (2020)

that “when everything around you is bluescreen it’s hard to visualise where you are”²⁹, which makes performing within the space increasingly difficult as “actors feed off the sets they are in”³⁰.

The current methods of design collectively encompass the entire profession of set construction, with different approaches resulting in alternate strengths and weaknesses. However, the individual techniques are rarely used as the sole method of set design within a motion picture, as “if you go too location it seems dated, if you go too VFX it doesn’t feel, real world”³¹. The use of multiple methods fused together throughout the film, allows for a design that appears grounded to the physical environment, whilst futuristic enough to display the imagination of the future (Rumbelow, 2023).

²⁹ Li, 2022

³⁰ Li, 2022

³¹ Rumbelow, 2023

Chapter 2: Intertwined Professions

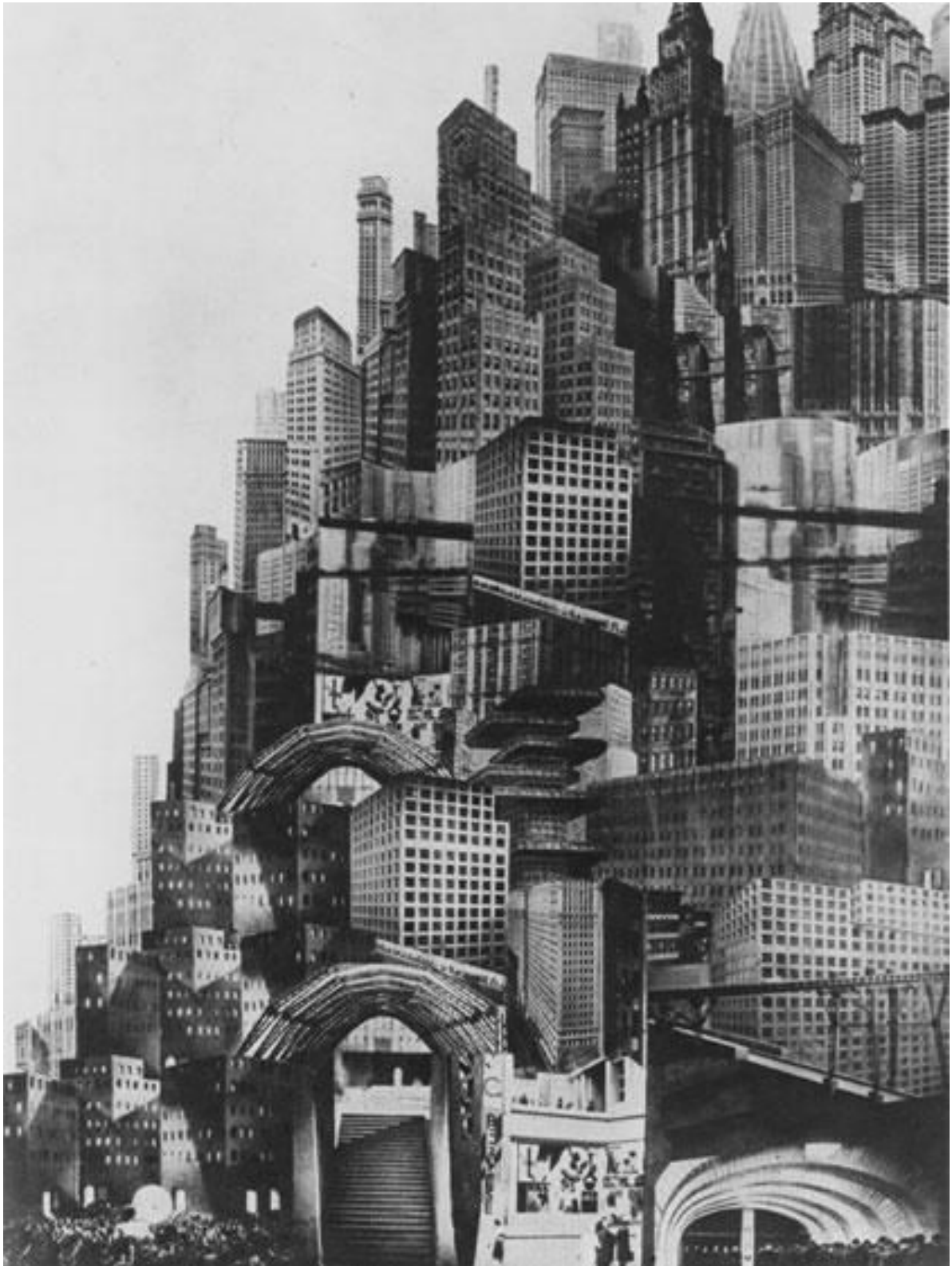


Figure 18: Concept art for *Metropolis* (Photo credit: P. Skinner)

The origins of the profession

There is a distinct difference in the output of work produced by the industries of architecture and set design, “architecture is the art of planning designing and constructing buildings”³², whereas scenic, or set design, is “the creation of scenery for television, film and stage”³³.



Figure 19: The erection of a film set (Photo credit: Babelsberg Studio)



Figure 20: The construction of a dwelling (Photo credit: H&H Builders Inc)

“Historically, the roles in the art department have been hard to define, mainly because of the ever-evolving nature of the job”³⁴. However, it can be argued that the core philosophy of the art department has remained the same throughout the evolution of film, and is defined by Li, as the “conceptualisation of a 3-dimensional space”³⁵, whether that space is built to last a century, a week or even if the space never physically exists but manifests through the use of CGI. It is this central concept that is the core root of these two industries of design, as the “interrelationship of architecture and film had started almost immediately”³⁶ with the employment of architects within film, dating back to 1895. Records from c.1930, suggest that “nearly 95% of all Hollywood art directors came from the profession”³⁷ of architecture, thereby solidifying the close relationship between the two professions. In the early years, the title of art director was not a commonly used term³⁸, instead referred to as ‘film architects’, essentially classifying the profession as architecture (Bergerfelder, Harris and Street, 2007, p46).

³² Collins, 2023b

³³ Collins, 2023c

³⁴ Shorter, 2012, p.8

³⁵ Li, 2022

³⁶ Froehlich, 2018, p.10

³⁷ Erengis, 1965, quoted in Esperdy, 2007, p.199

³⁸ “The title of Art Director came about in the 1930s, when filmmaking was brought indoors thanks to artificial lighting.” (Shorter, 2012, p.8)

The role of architecture within film

Throughout the evolution of set design and film, there has been a dichotomy amongst academics, critics and professionals within the industry, who abide by contrasting ideologies regarding the function of architecture and settings within film.

One interpretation of the purpose of architecture and setting displayed within film is that it should have characteristics that render it submissive, and timid in comparison to the plot or characters within, as to avoid distracting from the experience of the audience. Critics, Bergerfeld, Harris and Street, are advocates following the ideology, stating that “where it is allowed to dominate the narrative and become a spectacle, is seen to exert a negative influence”³⁹. Subsequently, this philosophy depicts that the role of architecture and the setting should not be portrayed as a quasi-character but rather provide a neutral environment. This ideology is reinforced by suggesting that, “The art director’s job is to provide ... a background and a background it should remain at all costs”⁴⁰, thereby creating the impression that by its very definition, the background should not be a primary feature within film. However, alternate interpretations suggest that the current approach to the function of architecture and settings within film should not be defined by the same standards of the primitive nature of early set design⁴¹.

An alternate interpretation pertaining to the role of the setting within film, is based on the notion that architecture should act as an additional character that assists in the development of the plot. Set designer Ernst Kettelhut⁴² openly adopted the ideology throughout his career. Dietrich Neumann summarised the work of Kettelhut and his ability “to accompany the plot, underlying and commenting on it, and beyond that, it could respond to the contemporary architecture debate”⁴³. Furthermore, Kettelhut’s implementation of this theory is perfectly encapsulated within his work on *Metropolis* which has consequently become a staple within the science fiction genre, with its claustrophobic city and domineering skyline foreshadowing and spearheading the architecture of the 20th century⁴⁴. The use of architecture displayed in films utilising the philosophy of a quasi-character can be observed through a variety of

³⁹ Bergerfelder, Harris and Street, 2007, p16

⁴⁰ Bergerfelder, Harris and Street, 2007, p13

⁴¹ Mary, 2022

⁴² “production designer and art director, known for *Metropolis*” (IMDB, 2023a)

⁴³ Neumann, 1995, p.98

⁴⁴ Elsaesser, 2000

precedents, including *The Cabinet of Dr Caligari*, *Blade Runner* and *Parasite* (2019) (Figure 21), as well as many others.



Figure 21: The horizontal and vertical configuration of the setting to represent the divide between the lower and upper-class characters, *Parasite* (Photo credit: R. Hartwich)⁴⁵

In addition, through the use of the landscape portraying a character within the film, a defining mood and atmosphere can be embedded within the storyline, as “Architecture can bring comfort and tranquillity, or, conversely, harshness and cold”⁴⁶ (Figures 22 and 23). This interpretation pertaining to the function of the setting within film is demonstrated within *Blade Runner*, where architecture is utilised to display the dark and gloomy atmosphere of the dystopian city, with Ridley Scott’s inspiration deriving from Figure 58. Throughout the film the plot is driven forward and mirrored by the architecture of the world build, the entire atmosphere of the film is captured within the scene in which the audience is introduced to the lead character, Rick Deckard. Here, the camera angle pans down through the street and fixates on Deckard, and in an instant, the overall theme of the film is displayed, the bustling street, the persistent downpour and the audible and visual pollution depicts the unforgiving landscape in which the film is set. However, Deckard is perceived as being unaffected by his surrounding environment, subsequently demonstrated by his familiarity and ease of navigating the cold and dystopian city, dominated by skyscrapers of monolithic proportions.

⁴⁵ CJ Entertainment and Barunson E&A. *Parasite* (2019)

⁴⁶ Shorter, 2012, p.32



Figure 22: The warm and welcoming atmosphere of *The Grand Budapest Hotel* (Photo Credit: S. Pires)



Figure 23: The cold and unwelcoming aesthetic of *Blade Runner* (Photo credit: Kazuchoice)⁴⁷

Interestingly, Rumbelow comments that, “things that the character interacts with tell a backstory”⁴⁸. This interpretation highlights the fact that the world depicted on screen has an imperative obligation to create the illusion that the character and world build precede the storyline witnessed by the audience and convey a sense of familiarity or incompatibility that will respond to the portrayal of the character. Therefore, allowing the architecture to act as a quasi-character throughout the film incorporates “more dimension, more interest and more authenticity to a set. It feeds our imagination and draws us into a world”⁴⁹.

The influence and advancement of the professions

The ongoing debate about the film and architecture professions asks the question, does film influence architecture or does architecture influence film? Menne⁵⁰ stated that “Cinema influenced the façades and topography of cities”⁵¹, whereas Notaro⁵², might contradict this view by commenting that “architectural drawings were an inspiration to filmmakers”⁵³. The frequent juxtaposition of interpretations had led to a dichotomy within the profession.

⁴⁷ The Ladd Company, Shaw Brothers and Warner Bros. *Blade Runner* (1982)

⁴⁸ Rumbelow, 2023

⁴⁹ Shorter, 2012, p.32

⁵⁰ Barbara Menne, author of *Cities and Cinema*, and the Assistant Professor of Cinema Studies at the University of Florida

⁵¹ Menne, 2008, p.6

⁵² Dr. Anna Notaro, author of *Futuristic Cinematic Visions and Architectural Dreams in the American Modern(ist) Metropolis*, and Senior Lecturer of Contemporary Media Theory at the university of Dundee

⁵³ Notaro, 2000, p. 169



Figure 24: Urban landscape of Wakanda, *Black Panther* (Photo credit: E. Nogueira)⁵⁴

In 2018, directed by Ryan Coogler, *Black Panther* was released (IMDB 2023b) and is named as “one of MCU’s⁵⁵ most acclaimed movies ... set in the fictional afrofuturist Wakanda”⁵⁶ (Figure 24). As an imagined African landscape displayed on screen, Wakanda is portrayed as a city that has thrived and evolved throughout solitude from modern society, resulting in its technological advancement that is expressed through the unique and futuristic architecture of the region (Lyonhart, 2022). The initial design concept of the urban landscape was derived from historical African architecture (Stouhi, 2022) that was later infused with “unprecedented technology, automation, and innovation”⁵⁷ to create the afrofuturist city that was instrumental in the success of the film, reflected by the 117 awards and 282 nominations received (IMDB, 2023b). As a testimony to the success and innovation of the film, also in 2018, a proposal for the creation of an African city was unveiled (Figure 25), supposedly inspired by the setting within *Black Panther*, which would encapsulate the fundamental qualities of Wakanda (Salaudeen, 2020).

⁵⁴ Marvel Studios. *Black Panther* (2018)

⁵⁵ The Marvel Cinematic Universe

⁵⁶ Stouhi, 2022

⁵⁷ Stouhi, 2022



Figure 25: Akon City (Photo credit: AkonCity)

Advertised as a “beacon of innovation and human development”⁵⁸, the Senegal-based, Akon City, will consist of six interwoven districts, each proficient in their own industry, that will span approximately 2,000 acres of land, across the current Cadastral de Mbodiene park (AkonCity 2023). The parallels between the proposed \$6Bn development and the fictional city of Wakanda, derive from the representation of culture and history within the schemes. The portrayal of Wakanda, despite its futurist aesthetic, is embodied with the ethnic identity and societal past of the town. Contrary to its digital fabrication, the landscape of the non-existent city is rich with the history of the local area, represented in the urban fabric, as modern skyscrapers stand adjacent to traditional African rondavel and tata residences (Figures 26 and 27), a testimony to the harmony, growth, and development of the city (Vemula, 2022). Furthermore, despite the clear technological advancement over time, the contrast between the historic and the modern erection of buildings within the film, is juxtaposed by the incorporation of “traditional African elements, including thatch roofs and hanging gardens on some of their tallest structures”⁵⁹, subsequently softening the eclectic nature of the urban landscape and unifying the architecture of the city.

⁵⁸ AkonCity 2023

⁵⁹ Malkin, 2018



Figure 26: A Traditional African rondavel hut (Photo credit: U. Anele)



Figure 27: Wakandan skyline demonstrating cultural and historical influence, *Black Panther*⁶⁰ (Photo credit: Behance)

In addition, pre-emptive of its construction, the concept behind the real-world Wakanda, Akon city, follows a similar philosophy with a design driven by “Local traditions and heritage ... helps our holistic approach to a futuristic city design”⁶¹. Subsequently, it can be inferred that in a similar fashion to Wakanda, Akon city will proudly display its Senegal and African heritage throughout the project as “futuristic design begins with an informed understanding of the past”⁶². Furthermore, the propaganda surrounding the city indicates that the residents within the urban development will be assisted through the use of artificial intelligence that will unify the city in a “network of connected devices ... that can communicate and exchange data”⁶³, resulting in the increased efficiency of the local area. This portrayal of technological integration throughout the landscape encompasses the proposal as a smart city, a parallel that enhances the synonymous nature between Wakanda and its real-world counterpart (AkonCity, 2023).

This strengthens the notion that architecture in a film can inspire, prompt, and create a real urban cityscape. However, alternate interpretations indicate that this evidence can be construed as inapplicable, with reference to the influence of the work of architect Zaha Hadid⁶⁴ that was exerted on the aesthetic of the architecture within the film (Vemula, 2022). Throughout the conceptualisation of *Black Panther*, set designer, Hannah Beachler, sought to

⁶⁰ Marvel Studios. *Black Panther* (2018)

⁶¹ AkonCity 2023

⁶² AkonCity 2023

⁶³ AkonCity 2023

⁶⁴ A leading figure within the field architecture with her futuristic designs that have become an inspiration to the perception of the future (Li, 2022)

find inspiration for the afrofuturist design of the Wakandan city. The work of Hadid, “One of the biggest inspirations of the Black Panther sets”⁶⁵, in particular the Wangjing SOHO (Figure 29) in Beijing and the DDP building in Seoul, which were paramount to the design of Wakanda, being described as “curved and futuristic, yet they had references to natural elements”⁶⁶, a concept that was adapted and implemented in the film⁶⁷ (Figure 28). The principles utilised by Hadid and displayed throughout the buildings were adapted and transferred onto the city-wide design of Wakanda, with fundamental ideology including, integration into context, curved and organic façades as well as a prominent yet unoppressive sense of scale, was reflected within the city aesthetic of the film (Vemula, 2022). Furthermore, the influence of Hadid is apparent throughout the urban topography of the motion picture, as interpretations suggest that this is a key factor in the success of Wakanda with critics stating, *Black Panther* is “on track to become one of the most-talked-about sci-fi films ever among urbanists and city planners”⁶⁸, a foresight to the future of urban topography.



Figure 28: Wakandan architecture inspired by the concepts of Zaha Hadid (Photo credit: P. Descargar)⁶⁹



Figure 29: Zaha Hadid, Wangjing SOHO building in Beijing (Photo credit: V. Bertrand)

As alluded to, the cyclical and repetitive nature of the debate further amplifies the interwoven nature between the two professions.

⁶⁵ Vemula, 2022

⁶⁶ Vemula, 2022

⁶⁷ Upon describing the nature of hadid’s work, Beachler (2018, quoted in Yalcinjaya, 2018) stated “That’s what I wanted people to feel for the modern architecture in Black Panther ... very curvy, no hard edges and the spaces feel both very large and intimate at the same time.”

⁶⁸ Malkin, 2018

⁶⁹ Marvel Studios. *Black Panther* (2018)

Chapter 3: The Imagination of the Future



Figure 30: Concept art for the future, *Blade Runner* (Photo credit: S. Mead)

Historical interpretations of the future

Over time the perception of the future urban landscape has developed and evolved in relation to the ideology of the general public. Whilst it is architects and urban planners that will inevitably build and design the city of the future, “architectural designs have to negotiate a host of constraints that simply don't apply to ... film-makers”⁷⁰. Subsequently, the history of film is enriched with the imagination of the future.

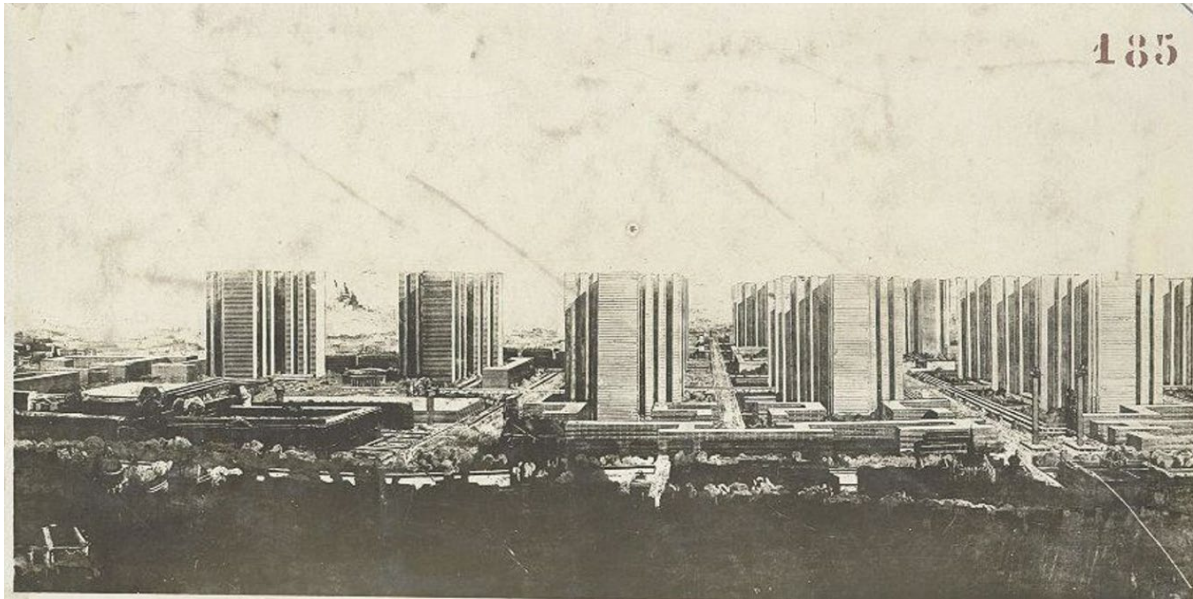


Figure 31: Le Corbusier's Paris Plan (Photo credit: Architectuural)

The urban topography of today is a vast contrast to the depictions of the future from the early 20th century, when the medium of film was a new concept with severe limitations. This meant that it was the drawings and imagination of architects that laid the foundation for the concept of the future. Lead architects such as Le Corbusier⁷¹, and illustrators, in particular Hugh Ferriss⁷², dominated the ideology of the future in the 1920s, with Le Corbusier's Paris Plan⁷³ (Figure 31) and Hugh Ferriss's collection, entitled *The Metropolis of Tomorrow*⁷⁴ (Figure 57). In 1925 the Plan Voisin was debuted to the world and is to this day renowned as “one of the most notorious urban projects by Le Corbusier”⁷⁵, with the proposal depicting the redesign of Paris. The urban redesign envisioned “a frontal attack on the most diseased quarters of the

⁷⁰ Dobraszczyk, 2019, p.10

⁷¹ Le Corbusier, (1887-1965) was a key figure in the international architectural movement with his most notable works including Villa Savoye and the Unite d'habitation (Scott, 2019)

⁷² Hugh Ferriss, (1889-1962) was an influential architect and illustrator, known for his monolithic and dystopian drawings of the future. (The Museum of Modern Art, 2023)

⁷³ Also known as the Plan Voisin

⁷⁴ Dobraszczyk, 2019

⁷⁵ Velasquez, 2016, p.229

city”⁷⁶, with the erection of the landscape of the future. Le Corbusier’s proposition of the *Plan Voisin* would create a city of regimented cruciform skyscrapers that dominated the world below, a dystopianesque concept reflected in the cities depicted in *Metropolis* and *Blade Runner*. Similarly, it was hypothesized that each skyscraper situated with Le Corbusier’s proposal, would accommodate a range of 20,000 to 40,000 inhabitants, thus inflating the overall population of the area to a predicted 500,000 to 700,000 people and transforming Paris into a vertical city (Le Corbusier, 1929). The fundamental principles of the Paris Plan, mirror the cinematic portrayal of the future of this period, with densely populated cityscapes and towering monolithic skyscrapers, however, there are some distinct differences that render Le Corbusier’s city of tomorrow incohesive to that of the on-screen portrayal, more specifically, of Fritz Lang’s *Metropolis*. The Paris Plan, in essence, redistributed the horizontal fabric of the city and reformed it into distinct vertical structures, efficiently minimising the surface area across which the inhabitants would reside, as stated by Le Corbusier, “the scheme covers 5% only of the ground with buildings”⁷⁷. As a consequence of this, the streets of Paris would be open and infused “harmoniously in a framework of trees and woods”⁷⁸ (Figure 32), creating a natural environment to juxtapose the brutalist stature of the domineering skyscrapers. Contrastingly, the future envisioned by *Metropolis* is void of nature and foliage with the city perceived as hostile and unwelcoming to the natural environment (Figure 33).

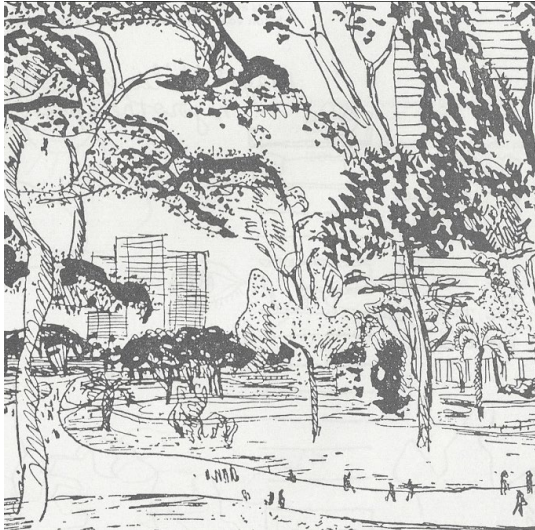


Figure 32: The ecology of Le Corbusier’s Paris Plan (Photo credit: Architectuural)



Figure 33: The sterile concrete cityscape of *Metropolis* (Photo credit: IMDB)⁷⁹

⁷⁶ Corbusier, 1987, p.280

⁷⁷ Corbusier, 1987, p.287

⁷⁸ Corbusier, 1987, p.287

⁷⁹ Universum (UFA). *Metropolis* (1927)

Contrary to the efficiency and innovation displayed throughout the Paris Plan, proclaimed by Le Corbusier as the “unfolding of a clear solution”⁸⁰ to the future of urban planning, the city of Paris unequivocally prohibited the design, with implications that the proposal was too radical and did not conform to the traditional values of the precedented Parisian urban landscape⁸¹ (Figure 35). Contrastingly, in 1927 Fritz Lang debuted *Metropolis*, a radical interpretation of the future that surpassed the innovative ideals of Le Corbusier (Figure 34), however, the film was endorsed by reviewers on the premise of the “astonishing imagery ...which depicted ... only **fifty** years ahead”⁸².



Figure 34: The regulated cityscape of *Metropolis* (IMDB: 2023)⁸³



Figure 35: Le Corbusier regimented Paris Plan (Photo credit: Artists Right Society)

The Power of Cinema

The role of the cinema throughout the popularisation of film is immeasurable, as the two industries have become synonymous with each other. The cinema, in essence, acts as a stage for the philosophies and concepts of directors and production staff behind the scenes, similarly, with its modern-day global reach, interpretations theorise, cinema has enabled the film industry to become “the most powerful vehicle for publicising architectural practice”⁸⁴. Film has become a medium in which designs can be explored, untethered by the constraints that plague the architectural profession such as practicality, bureaucracy or even reality, and as a result, throughout the influence of cinema these structures of unprecedented architectural character, have “crossed the borders of consciousness without being questioned”⁸⁵. Therefore, the influence of cinema is assisting the profession of architecture to evolve, as the

⁸⁰ Corbusier, 1987, p.301

⁸¹ Velasquez, 2016

⁸² Notaro, 2000, p. 178

⁸³ Universum (UFA). *Metropolis* (1927)

⁸⁴ Ramirez, 2004, p.25

⁸⁵ Kracauer, 1947, p.162

futuristic architectural propaganda depicted in film, gradually becomes ingrained within the public's perception, and consequently, with the continuous exposure of radical and innovative architecture, the public becomes desensitised, eventually accepting the real-world interpretations that imitate their on-screen counterpart. Evidently, as theorised by Froehlich⁸⁶, “architecture from a virtual world is impacting the perception of architecture in the real world”⁸⁷. This interpretation however is not without precedent, as cinema dictated the rise and fall of modern architecture. Throughout the 1920s and 1930s, cinema was in turmoil regarding the portrayal of modern architecture, with alternate films projecting contrasting influential views upon their audiences. Credited as “the first to introduce the modern ... into the Hollywood film”⁸⁸, head art director at Metro-Goldwyn-Mayer (MGM) and influential industry figure, Cedric Gibbons⁸⁹ was an advocate of the utilisation of the modern architectural style within settings, such as in *Our Dancing Daughters* (1929), which as stated by Ramirez⁹⁰ “took the country by storm ... their potent glamorousness stirred mimetic desires”⁹¹ across widespread audiences. Following this, the MGM motion picture, *When Ladies Meet* (1933), depicted a scene in which a modern barn house (Figure 36) was featured that consequently “provoked a flood of letters to the studio requesting blueprints and photographs”⁹², displaying the power of cinema and the subsequent desires it fabricates.

⁸⁶ Dietmar Froehlich, author of *The Chameleon Effect: Architecture's Role in Film*, and Assistant Professor at the Gerald D. Hines College of Architecture (University of Houston, 2023)

⁸⁷ Froehlich, 2018, p.9

⁸⁸ Lamster, 2000, p.4

⁸⁹ Cedric Gibbons, (1890-1960) was a prominent figure C.1920, known primarily for his role as head art director of Metro-Goldwyn-Mayer IMDB (2023)

⁹⁰ Juan Ramirez, author of *Architecture for the Screen: A Critical Study of Set Design in Hollywood's Golden Age*, and a Professor of the History of Art at the Autonomous University of Madrid (Accessed: 11 May 2023)

⁹¹ Ramirez, 2004, p.24

⁹² Ramirez, 2004, p.24



Figure 36: The modernist barn conversion, *When Ladies Meet* (Photo credit: The Metzinger Sisters)⁹³

However, by the 1930s the perception of the public towards the aesthetic of the modern setting deteriorated as films began to introduce negative connotations regarding the architectural style. *Our Blushing Brides* (1930) utilised the plot of the film to insinuate the undesirability and tainted nature of modernity, as characters “had to sacrifice their modernistic settings”⁹⁴ in order to obtain redemption (Figures 37 and 38), thus creating an air of uncertainty surrounding the public’s allegiance to the modern style.

⁹³ Cosmopolitan Productions, Metro Goldwyn Mayer (MGM). *When ladies Meet* (1933)

⁹⁴ Esperdy, 2007, p.208



Figure 37: Early scenes in the film in which the character indulges in her modern setting, *Our Blushing Brides* (Photo credit: IMDB)⁹⁵



Figure 38: The end of the film where the character has sacrificed her modernistic setting and repented her previous life of sin, *Our Blushing Brides* (Photo credit: D. Sebastian)⁹⁶

Subsequently, the modern rapidly deteriorated **which was** demonstrated in 1946 with the announcement of the most sought-after movie sets of the last two decades, in which “not a single fully modern set was included”⁹⁷. Furthermore, whilst this portrayal fails to acknowledge the external contributing factors, evidence shows that film had both elevated and decimated the public perception of modern architectural styling, as summarised by architectural historian Gabrielle Esperdy:

“Beginning in the late twenties and continuing into the thirties, motion picture set design ... could be summed up by two fairly simple equations: modern equals bad; traditional equals good”⁹⁸.

Modern interpretations of the future

There is an air of uncertainty as to the evolution of the urban landscape, with climate change, population expansion and a range of additional factors that contribute towards the inconclusiveness of the future. **The** overwhelming catalogue of predictions and portrayals **has allowed cinema to** “serve as a laboratory”⁹⁹. There is no definitive answer as to the future, as shown in Figure 39, concepts and popularity regarding the advancement of the urban landscape evolve over time.

⁹⁵ Metro-Goldwyn-Mayer Studios. *Our Blushing Brides* (1930)

⁹⁶ Metro-Goldwyn-Mayer Studios. *Our Blushing Brides* (1930)

⁹⁷ Esperdy, 2007, p.207

⁹⁸ Esperdy, 2007, p.207

⁹⁹ Froehlich, 2018, p.151

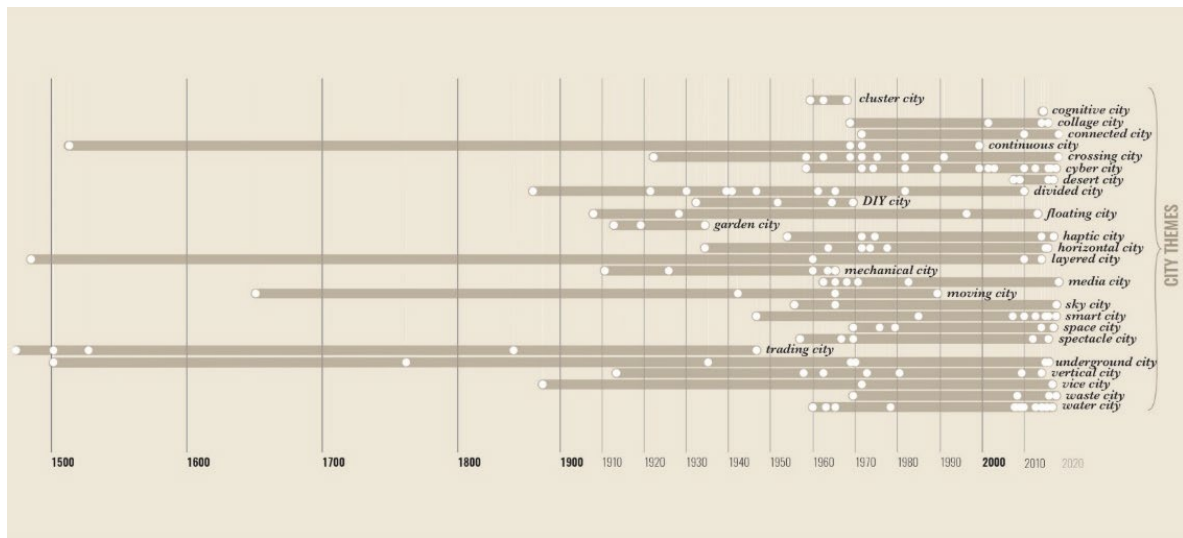


Figure 39: Futuristic trends timeline (Photo credit: N. Dunn, P. Cureton)

Smart cities

“A key development over the last twenty years has been the emergence of Smart Cities”¹⁰⁰, which theorises an urban landscape that is technologically driven with all aspects of life enhanced by the statistics and calculations of artificial intelligence (AI). The depiction of smart cities is dependent on the trademark feature of luscious green urban topography that aids in the portrayal of a world eradicated of pollution and grime, a systematically flawless utopia. Following the 2007 Climate Energy Plan of Paris¹⁰¹ Paris-based practice, Vincent Callebaut Architectures¹⁰², a highly prestigious and sustainably oriented practice, unveiled their proposal for the redesign of Paris¹⁰³, (Figure 40) a dichotomy of the portrayal of Plan Voisin, 82 years before (Figure 31). The recent popularisation of smart cities within the imagination of the future is seldom without critique, as interpretations exploit weaknesses within the design philosophy indicating that the “sterilization of complete cities seems unlikely, especially those which already exist”¹⁰⁴.

¹⁰⁰ Dunn and Cureton, 2020, p.104

¹⁰¹ “The adaptation strategy aims at coordinating the initiatives at the level of the Parisian territory, mobilising relevant stakeholders and proposing new actions with the goal of adapting Paris to the effects of climate change and the scarcity of resources, while making the city more resilient, more attractive, and a nicer place to live.” (The European Climate Adaptation Platform Climate, 2022)

¹⁰² Founded in 2000 by Vincent Callebaut, the eco-driven practice has been categorised as one of the top 50 green planet architecture firms. (Vincent Callebaut Architectures, 2023)

¹⁰³ Dunn and Cureton, 2020

¹⁰⁴ Dunn and Cureton, 2020, p.104



Figure 40: Vincent Callebaut Architectures redesign of Paris as a smart city (photo credit: N. Ibrahim)

The propaganda for the imagined smart cities of the future is scarcely limited to the proposals of the architectural profession, with specific films advocating this urban fantasy. In 2022 the Smart City was in *Doctor Strange and the Multiverse of Madness* (Figure 41). Within the film, the protagonist is transported to an alternate reality that embodies the characteristics of a Smart City. The audience bears witness to the beauty of the harmony between the integrated nature and urban landscape, which is juxtaposed by the previous scenes within the film that portrays a cold and grey concrete cityscape, not unfamiliar with that of the modern world. Through its appearance within the film, the enticing characteristics of the Smart City as the future of urban topography are enhanced, irrespective of the aforementioned concerns of impracticality.



Figure 41: The biophilic architecture of Earth 838, *Dr Strange and the Multiverse of Madness* (Photo credit: K. Stinson)¹⁰⁵



Figure 42: Vincent Callebaut Architectures redesign of Paris, street scene (photo credit: N. Ibrahim)

Subterranean cities

The envisioned future smart city is one of many imagined scenarios regarding the evolution of the urban landscape, with alternate portrayals depicting subterranean cities. This approach

¹⁰⁵ Marvel Studios. *Doctor Strange and the Multiverse of Madness* (2022)

favours a more dystopian philosophy regarding future cityscapes, with the premise being that excessive climactic episodes, resulting from climate change, have rendered the earth's surface uninhabitable. Unveiled in 2017 the Chthonopolis proposal, (Figure 43) designed by architect Nic Clear, aimed to "radically question the traditional hierarchies of vertical space by inverting them"¹⁰⁶. The hypothetical development estimated that it could host 1M inhabitants beneath the surface, as the subterranean infrastructure would mimic that of an insect colony (Dunn and Cureton, 2020, p.168).

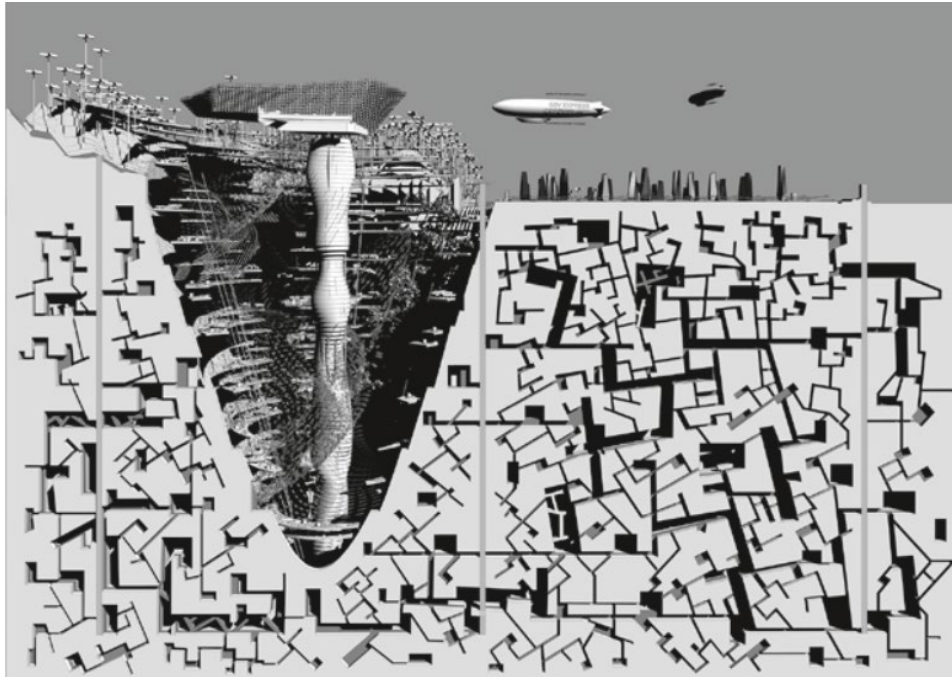


Figure 43: A section cut showing the subterranean labyrinth of Chthonopolis (Photo credit: N. Clear)

The ideals of subterranean cities have been previously featured throughout the film industry, most predominantly, *City of Ember* (Figure 44), which showcased the undesirable and potentially fatal consequences of a world beneath the surface. The film depicts a society that has fallen victim to the practical longevity of subterrestrial life, as a scarce food supply, subpar air quality and deteriorating electrical source threaten to entrap the last of society in a tomb of their own volition. In addition to this, critics of the future encompassing a subterrestrial urban

¹⁰⁶ {Dunn and Cureton, 2020, p.168}

¹⁰⁶ (Abbot, 2016, p.94)

landscape articulate the negative attributes of this concept, with implications of the carceral nature of these “cities that imprison their residents even with the best of intentions”¹⁰⁷. However, despite the implications of dire consequences, the scarcity of habitable environments within most major cities, the notion of a future beneath the surface becomes more enticing.

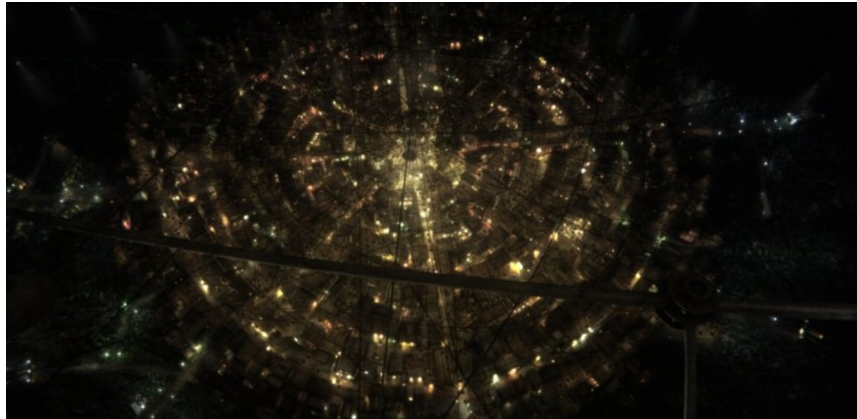


Figure 44: Aerial view of Ember, *City of Ember* (Photo credit: BUF)¹⁰⁸



Figure 45: Promotional poster the film (Photo credit IMDB, 2023)

Space city

Alternative theories interpret that the next stage in the evolution of architecture will facilitate off-world colonisation. This interpretation is supported by a proposal published in 2017 (Dunn and Cureton, 2020) as a feature within the Shanghai Urban Space and Art Season, the architectural practice, Stefano Boeri Architetti¹⁰⁹ showcased their proposal for the future construction of a vertical forest on Mars (Figure 46). Not unlike the subterranean concept, this theory also operates under the premise that the repercussions of global warming have eradicated the continued habitation of Earth (Dunn and Cureton, 2020).

¹⁰⁷ Abbot, 2016, p.94

¹⁰⁸ Playtone, Walden Media. *City of Ember* (2008)

¹⁰⁹ “Based in Milan with offices in Shanghai and Tirana, since 1993 Stefano Boeri Architetti has been dedicated to research and practice mainly in architecture and urban planning, but also in the fields of interior design and culture.” (Stefano Boeri Architetti, 2023)



Figure 46: A city on Mars (Photo credit: Stefano Boeri Architetti)



Figure 47: The Cooper Station, *Interstellar* (Photo credit: A. Stuart)

The radical proposal of a future urban landscape capable of sustaining life in space, whilst **perhaps** considered incomprehensible within the architectural profession, is a concept that has been exhibited on the silver screen for decades. In 2014, Christopher Nolan glorified the portrayal of extra-terrestrial architecture with the release of *Interstellar*, a film surrounding the notion that the future of mankind must exist on an alternate planet (IMDB 2023c). The final scenes of the film depict the protagonist discovering salvation on an interplanetary vessel known as the Cooper Station. As displayed in **Figure 47**, the off-world landscape is envisioned as a breath-taking marvel of futuristic engineering, that is absolved from the pollution that plagues the earth. Whilst there are ramifications to the future of the urban landscape existing outside of Earth, it is common for the portrayal within film to surpass these constraints as the audience is exposed to the notion that a city amongst the stars is a positive and desirable advancement of the urban landscape, untethered by the architectural mistakes of the past.

Whilst only a select sample of concepts regarding the current imagination of the future of the urban landscape has been discussed **in** this dissertation, the author acknowledges the vast expanse in a variety of futuristic portrayals in relation to the evolution of architecture.

There is no clear or predetermined answer as to which, or if any of the currently imagined ideologies of the future urban landscape will come to fruition, however, the architecture of the modern cityscape would have been unfathomable only a century ago, leaving the future of architecture open to interpretation.

Chapter 4: The Future of the Past in the Present



Figure 48: Director Ridley Scott featured with a scale model of the Tyrell Corporation building (Photo credit: Vanity Fair)

“architecture envisioned for the film becomes a field for experimentation. This is particularly true for architecture in science fiction films. In this genre architecture anticipates the built future”¹¹⁰

There is a multitude of films that offer a commentary on the urban landscape of the future, however, throughout this catalogue of architectural innovation depicted on the silver screen, there are few films that have disrupted the consensus of the future as was done with the release of *Metropolis* in 1927 and *Blade Runner* in 1982. Interpretations suggest that the release of these two films changed the course of the perception of the future, with *Metropolis* described as “an important turning point in the development of film architecture”¹¹¹, and *blade runner* heralded as “a new standard ... in science fiction films”¹¹².

Metropolis

Often referred to as “one of the world's first feature-length science fiction movies”¹¹³, *Metropolis* depicts the story of a social uprising, set against the backdrop of the then-futuristic urban landscape of the year 2000. Comprised of skyscrapers and sky bridges, the strictly regimented cityscape of the dystopian future was a bold and innovating portrayal, to which the silver screen had never before borne witness. However, future, as displayed in *Metropolis*, existed long before its cinematic debut, as on October 24th, 1924, upon first witnessing the skyline of New York, Fritz Lang was imbued with a revelation as to the future of architecture (Notaro, 2000) (Figure 49).

"I saw a street, lit as if in full daylight by neon lights and topping them, oversized luminous, advertising moving turning flashing on and off spiralling [...] something which was completely new and nearly fairy tale like ... this impression gave me the first thought of an idea for a town of the future”¹¹⁴.

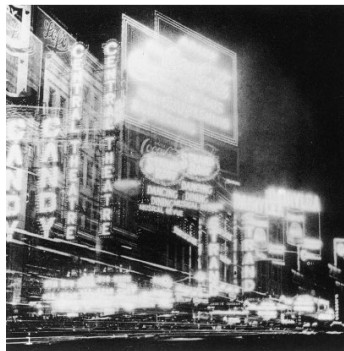


Figure 49: Fritz Lang's double exposure photograph of Broadway, New York (Photo credit: D. Kinemathek)¹¹⁵

¹¹⁰ Froehlich, 2018, p.114

¹¹¹ Neumann, 1995, p.94

¹¹² Eresa, 2017, p.129

¹¹³ IMDB, 2023b

¹¹⁴ Peter Bogdanovich, 1969, quoted in Elsaesser, 2000, P9

¹¹⁵ "Lang tried to capture the overwhelming impression of the multitude of lights on Broadway and their constant movement with his photographic camera by exposing film twice. And no doubt, his photograph directly informed the cinematography of the night-views of *Metropolis*" (Neumann, 1995, p.34)

Furthermore, Lang's undeniable faith in his recollection of this exact moment as the inception of the city of *Metropolis*, demonstrates the impressive stature and unprecedented cutting-edge nature of New York architecture circa 1920. Surrounding this period, New York, in particular Manhattan, was thought to be the city of urban innovation most closely associated with the next step in the evolution of architecture (Ramchurn, 2016). Interpretations, such as the one of Ramchurn, allude to the significance of the city, stating, "Manhattan was showing, the future ... a place where the architecturally impossible was slowly becoming real"¹¹⁶ (Figure 50).

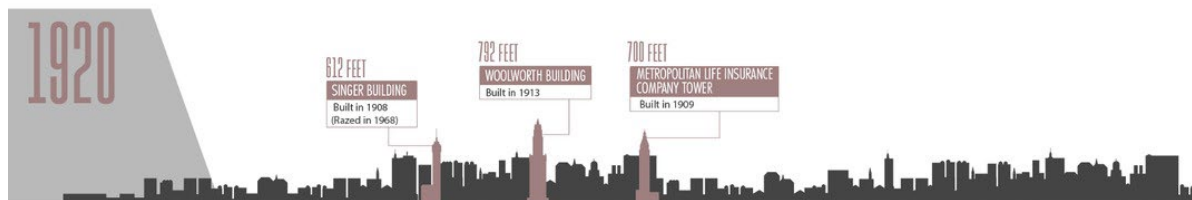


Figure 50: The New York skyline C.1920 (Photo credit: ArchDaily)

Consequently, Lang's portrayal of the future of the urban landscape embodies a Western influence within its aesthetic, with its staggering skyscrapers and restless atmosphere portraying unmistakable parallels with the city of New York (Ramchurn, 2016). Furthermore, it can be inferred that Lang, an avid admirer of the profession, was not ignorant towards the trends in the architectural stylings and influences of the 1920s, subsequently, interpretations dictate that Lang's incorporation of art deco within the film corresponds with the frequent nature and sudden influx of this styling of architecture throughout the period (Neumann, 1995, p.35). The influence of art deco can be seen throughout the entirety of the film, with distinct references, including the stone façade of the skyscrapers, that is balanced by more subtle incorporations, like that of the furniture in the office of the city ruler. However, the film's inclusion of architectural stylings throughout this period is not limited to the sole utilisation of art deco, as clear influences originating from alternate architectural movements can be viewed within the film, such as that of the Bauhaus movement. Despite not obtaining a citywide influence like that of art deco, there is a particular feature within the film that is a distinct tribute to the work of Walter Gropius, in particular his 1921 monument (Neumann, 1995, p.36). As shown below, the plinth on top of which sits the worker's gong, bears a striking resemblance to the work of the Bauhaus architect, with each concrete plinth fabricated from an irregular configuration of stacked quadrilaterals (Figures 51 and 52). Despite the exaggerated dimensions of the cinematic counterpart and its inclusion of a Gong centrepiece, interpretations infer, "the base for this gong was modelled on Walter Gropius's ... monument"¹¹⁷.

¹¹⁶ Ramchurn, 2016

¹¹⁷ Neumann, 1995, p.36



Figure 51: Walter Gropius's Bauhaus 1921 monument (Photo credit: R. Wolfe)



Figure 52: The worker's gong, *Metropolis* (Photo credit: IMDB)¹¹⁸

A key factor in the success of *Metropolis* was the remarkable nature of its dystopian portrayal, with the futuristic effect exclusively obtained as a consequence of the implementation of cutting-edge technology and innovative design techniques. Without the availability of CGI, the world build existed in the form of a scaled physical model of 5175m² (Notaro, 2000) that facilitated, "imposing towers of 250 stories and nine levels of multilane traffic systems"¹¹⁹. Everything within the city was built in a small-scale counterpart and placed within the model, however, once created, the role of bringing the model to life with inhabitants occupying the space, brought challenges of its own. Features, in particular cars and planes, were portrayed moving through the model with the use of the stop-motion animation technique, which helped to bring the bustling city and its infrastructure of monolithic proportions to life (Figures 53 and 54).



Figure 53: The process of stop motion animation on the set of *Metropolis* (Photo credit: S. Pseno)

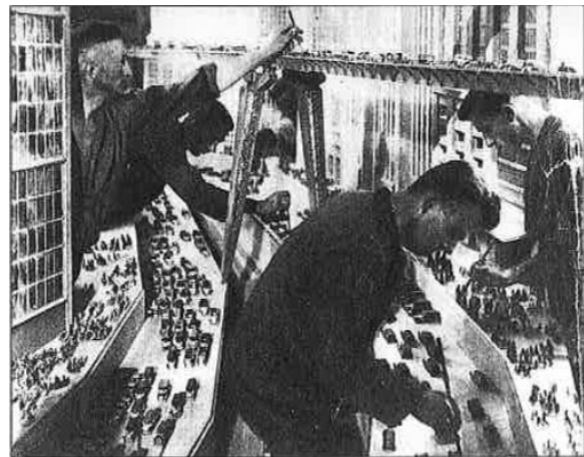


Figure 54: Stop motion movement in *Metropolis* (Photo credit: D. Neumann)

¹¹⁸ Universum (UFA). *Metropolis* (1927)

¹¹⁹ Notaro, 2000, pp. 178-179

However, in order to create the illusion of people occupying the space, a far more innovative technique was developed known as the Schufftan process¹²⁰ (IMDB, 2023b). However, despite the innovation displayed throughout the production of *Metropolis*, interpretations suggest that the film was “timebound, conditioned by the technologies available”. Nonetheless, this interpretation does not discredit the success of the film as sources confirm that “At the film's premiere in Berlin on January 10, 1927, the audience burst into applause at some of the more spectacular scenes”¹²¹, and to this day it is renowned as the 144th highest ranked movie of all time (IMDB, 2023b). The success of the film altered the future of the urban environment as it inspired not only architecture but a new generation of architects. Furthermore, critics, including **Elsaesser**, infer that the release of *Metropolis* in 1927 helped give rise to some of the leading architects throughout the 20th century. As stated, *Metropolis* “nurtured euphoric fantasies of the city machine in the spirit of Le Corbusier, or latterly Rem Koolhaas”¹²². Subsequently, this theory demonstrates the importance of Fritz Lang's portrayal of the future as it exposed mass audiences to the next step in the evolution of architecture and laid the foundation for the acceptance of the modern architecture movement.

Blade Runner

The release of *Metropolis* reinvented the perceptions of the urban landscape and set the precedent for early 20th-century architecture. However, in a similar fashion, the imagination of the future was once again redefined with the release of a single film. *Blade Runner*. In 1982 Ridley Scott debuted his vision for the cityscape of 2019, as the film follows bounty hunter Rick Deckard as he traverses across the unforgiving urban fabric of dystopian Los Angeles (IMDB, 2023c). There is a wealth of interpretations surrounding the inspiration behind Scott's portrayal of the future of architecture, as, unlike the instant revelation of Fritz Lang, there is no isolated incident that led to the inception of the film's urban landscape. Initial interpretations speculate that the vision for the future originated in the director's past, with reference to Teesside Steelworks, located in Scott's hometown, which has a distinct likeness to the industrial cyberpunk aesthetic of the film (Dobraszczyk, 2019) (Figures 55 and 56).



Figure 55: Teesside Steelworks at night (Photo credit: G. Burton)



Figure 56: Opening scene of *Blade Runner* (Photo Credit: C. John)¹²³

Alternatively, additional interpretations theorise that the work of 1920s illustrator, Hugh Ferriss, was the inspiration behind the design of the film (Figure 57), with the artist's dark atmosphere and monolithic structure, reflected in the overall ambience of *Blade Runner*. The Tyrell

¹²⁰ Through the use of mirrors, this process enabled the production team to reflect real actors into the minuscule version of the city at the appropriate scale, whilst retaining their lifelike features, subsequently improving the realism of the constructed model and enhancing the illusion created for the screen.

¹²¹ IMDB, 2023b

¹²² Elsaesser, 2000, pp.65-66

¹²³ The Ladd Company, Shaw Brothers and Warner Bros. *Blade Runner* (1982)

Corporation headquarters performs in a similar dominant and overbearing manner as it towers over and suppresses the landscape below, a concept not unfamiliar to the work of Hugh Ferriss. However, this interpretation is juxtaposed by contrasting evidence that dictates, the cold and bleak aesthetic of *Blade Runner* was a replicant of the atmosphere of artist Edward Hopper's hauntingly lonely painting *Nighthawks* (Sammon, 1996) (Figure 58).

"I was constantly waving a reproduction of this painting under the noses of the production team to illustrate the look and mood I was after in *Blade Runner*."¹²⁴

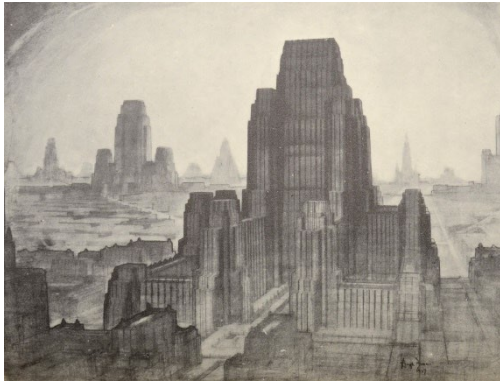


Figure 57: Hugh Ferriss's *Metropolis of Tomorrow*, 1929 (Photo credit: H. Ferriss)



Figure 58: Edward Hopper's cold and dystopian painting, *Nighthawks*, 1942 (Photo Credit: Art Institute Chicago)

Furthermore, in a similar nature to *Metropolis*, initial renditions of *Blade Runner* were conceptualised based on New York, as this was interpreted as the city from which the setting would derive. Subsequently, lead concept artist and futurist, Syd Mead, established his drawings and sketches on the infamous Manhattan skyline, with Ridley Scott, "eager to feature the Chrysler building"¹²⁵. However, in the decades following the release of *Metropolis*, the city of New York had been usurped as a beacon of the future, with the current consensus depicting that alternate cities, such as Hong Kong and Shanghai, (Ramchurn, 2016) had an increased futuristic aesthetic, in particular, the district of Bund-Pudong, entitled by critics as "more futuristic than what can possibly be found anywhere else in the world"¹²⁶ (Figure 59). Consequently, despite being set within the city of Los Angeles, the influence of Eastern culture is evident throughout and dominates the entirety of the film's aesthetic (Ramchurn, 2016).

¹²⁴ Scott 1982, quoted in Sammon, 1996, p.74

¹²⁵ Sammon, 1996, p.97

¹²⁶ Ceresa, 2017, p. 138



Figure 59: Bund-Pudong futuristic skyline (Photo Credit: China Plus)

A distinct feature regarding the aesthetic of the urban landscape, displayed throughout the film, is the concept that the architecture of the future is one of retrofitting (Sammon, 1996) (Figures 60 and 61).

“Everything is a combination of advanced technology installed over older, outdated structures, or objects.”¹²⁷



Figure 60: Behind the scenes of *Blade Runner*, MGM Backlot studio, showing the retrofitted nature of the architecture (Photo credit: L. Cranston)

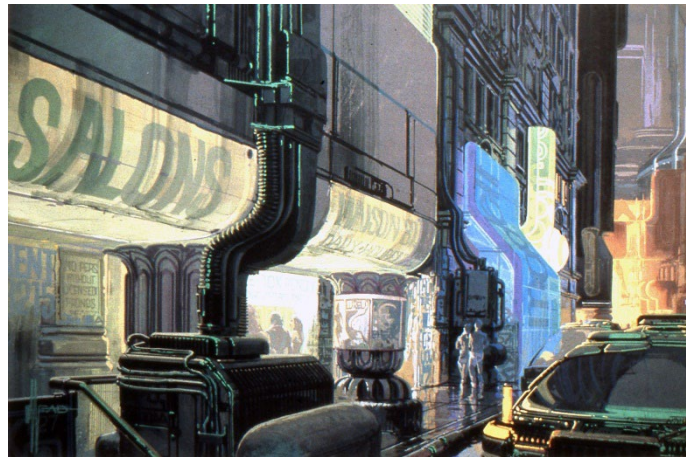


Figure 61: *Blade Runner* concept art by Syd Mead showing the retrofit nature of the city (Photo credit: The American Cinematographer)

Constructed on the backlot of the production studio, the primary setting for the scenes, a ground-level cityscape, was constructed in a mimetic fashion to the concept of the film, as existing buildings were covered in layers of retrofitted pipes, vents, and tubing, of such an overwhelming quantity that the initial buildings were barely recognisable (Neumann, 1995).

¹²⁷ Ceresa, 2017, p.137

However, in order to obtain the overhead views of the urban landscape, a physical small-scale model was constructed depicting the monolithic architectural feature of the world build, the Tyrell Corporation office building. (Sammon, 1996) Throughout the production of the film, an executive decision was made to utilise physical models as the primary source of fabricating the city (Figure 62), and whilst elements of CGI were incorporated within the film, budgetary requirements heavily dictated the use of digital effects. The proposed cost analysis following the initial request for special effects dictated that the budget required, solely for the use of computer-generated imagery, totalled \$5.5 million, however, when the time came to begin the proceedings, the existing budget was a fraction of the required cost, with only \$2 million available, resulting in a large number of scenes becoming unobtainable and obsolete (Sammon, 1996).



Figure 62: The Tyrell Corporation building model that was utilised within the film, *Blade Runner* (Photo credit: P. Sammon)

In addition to the construction of sets and models, the production of *Blade Runner* additionally opted to film in existing real-world locations, most notably, the Bradbury building and the Ennis Brown House (Neumann, 1995) (Figure 66). Acting as the setting for the climax of the film, the Bradbury building is an architectural staple within a pinnacle scene of *Blade Runner*. However, through the use of cinematic augmentation, the film rendition of the architecture portrayed the Bradbury building in a vastly different aesthetic to that of its real-world existence, with a dark atmosphere and dramatic shafts of light, manipulating the existing structure to conform to the bleak and dystopian nature of the film (Froehlich, 2018).

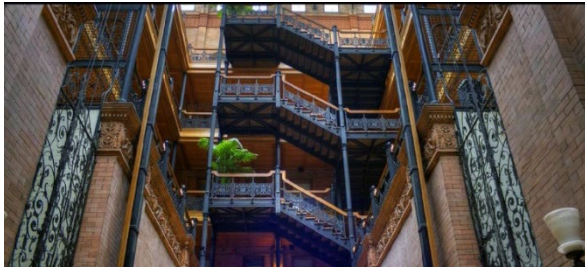


Figure 63: The warm and welcoming atmosphere of the real-world Bradbury building (Photo credit: T. Hoffarth)



Figure 64: The cold and intimidating aesthetic of the *Blade Runner* portrayal of the Bradbury building (Photo credit: T. Hoffarth)¹²⁸

This ideology was also utilised within the appearance of the Ennis Brown House as the modified format of the building resulted in a distinctly different layout within its film portrayal, to that of its real-world counterpart (Figures 63 and 64). Furthermore, the digital alterations of the building not only conveyed it as a layer in the history of the city, but also manipulated the setting of the building so that it was featured “towering in the sky”¹²⁹ with a “huge megastructure looming behind it in the distance”¹³⁰. *Blade Runner*’s manipulation of the existing buildings of the real world provided the city with a further sense of architectural credibility as implored by Ridley Scott, who stated, “I insisted that *Blade Runner*’s final look be authentic, not just speculative”¹³¹.



Figure 65: The Ennis Brown House as featured in *Blade Runner*, with its iconic tile pieces on display (Photo credit: B. Marcus)¹³²



Figure 66: Frank Lloyd Wright's Ennis Brown House (Photo credit: J. DeBord)

The modern-day consensus surrounding *Blade Runner*, heralds the film for its implementation of architecture to set the mood, atmosphere and tone of the urban cityscape. However, this concept was not always welcomed by the audiences who witnessed the film, as surrounding its release, sources suggest that the “bleak themes quickly caused a decrease in attendance ratings”¹³³ towards the movie. However, whilst it does not romanticise the evolution of architecture, the film can be viewed as a cautionary tale with a powerful message as to the

¹²⁸ The Ladd Company, Shaw Brothers and Warner Bros. *Blade Runner* (1982)

¹²⁹ Sammon, 1996, pp. 254-255

¹³⁰ Sammon, 1996, pp. 254-255

¹³¹ Scott 1982, quoted in Sammon, 1996, p.73

¹³² The Ladd Company, Shaw Brothers and Warner Bros. *Blade Runner* (1982)

¹³³ IMDB, 2023c

future of the urban landscape, with critics stating, "no movie has been more discussed in the context of utopian or dystopian city-making than 1982's *Blade Runner*."¹³⁴

The unprecedented and significant appearance of both films, regarding the portrayal of the urban landscape of the future, marked the inevitability of the influence these two motion pictures would exert on the evolution of architecture. Throughout researching this premise, the author uncovered distinct parallels between that of the fictional world depicted on screen in both *Metropolis* and *Blade Runner*, in comparison to the urban landscape of the 21st century.

Megalopolis

A fundamental concept that was portrayed in both *Metropolis* and *Blade Runner*, was the notion that the urban landscape of the future was not a compilation of large cities, but rather a megalopolis¹³⁵, a city of global proportion. Whilst the theory of a city with an overwhelming calibre was alluded to within *Metropolis*, the concept of global urban sprawl was rigorously explored within Ridley Scott's premonition of 2019 Los Angeles (Figure 66). Furthermore, the concept of a city of immense proportion was engrained into *Blade Runner* from the early stages of conception as it aided in the development of the film (Sammon, 1996).

"we took that idea and projected it forty years into the future and came up with a megalopolis - the kind of city that could be where New York and Chicago join, with maybe a hundred million people living there"¹³⁶

Ridley's projection, and foresight, of the scale of the urban landscape of the future, whilst not evident in New York, is thought to come to fruition in the western hemisphere, more specifically China. Stated as "the most rapid urban expansion in human history"¹³⁷, the cities of Hong Kong, Shenzhen and Guangzhou (Figures 67, 68 and 69) are displaying urban sprawl at an astronomical rate that is theorised to lead to the creation of a future megalopolis. Sources indicate that as of 2019 the accumulative population of all three cities totalled an estimated 31.2 million inhabitants, subsequently demonstrating that the convergence of this triad of cities, situates the resultant urban landscape well within the definition of a modern-day megalopolis (Dobraszczyk, 2019).

¹³⁴ Toderian 2018, quoted in Malkin, 2018

¹³⁵ "A megalopolis is a very large city, or an urban area that consists of several towns and cities." (Collins, 2023e)

¹³⁶ Scott 1982, quoted in Sammon, 1996, p.75

¹³⁷ Dobraszczyk, 2019, p.170



Figure 67: Hong Kong skyline
(Photo credit: M. Mendonca)



Figure 68: Shenzhen skyline
(Photo credit: J. Carter)



Figure 69: Guangzhou skyline
(Photo credit: Xinhua)



Figure 70: *Blade Runner* skyline (Photo credit: R. Ebert)¹³⁸

Furthermore, an additional feature within the impending megalopolis of Hong Kong, is further solidifying the influence and prediction of both *Metropolis* and *Blade Runner*, as within the parameters of the city lies a Stadkrone¹³⁹ (Figures 71, 72 and 73). Despite Taut's notion of the city crown predating *Metropolis* by a short period of 8 years, Fritz Lang's city of the future did incorporate the concept of a stadkrone, as within the film a structure of monolithic proportion diminished the scale of the city in its wake. Furthermore, this ideology was also featured in the 1982 motion picture *Blade Runner*, however, Scott's envisioned design for the stadkrone, was featured on a scale of such substantial proportion that the Tyrell Corporation headquarters had the capacity to dominate and define the entirety of the infinite urban landscape.

¹³⁸ The Ladd Company, Shaw Brothers and Warner Bros. *Blade Runner* (1982)

¹³⁹ First publicised in 1919 by German architect and urban planner Bruno Taut, the concept of a stadkrone or city crown, operates under the notion that "the use of individual structures define and affect the planning of an entire city". (Taut, 1919, p. 121)

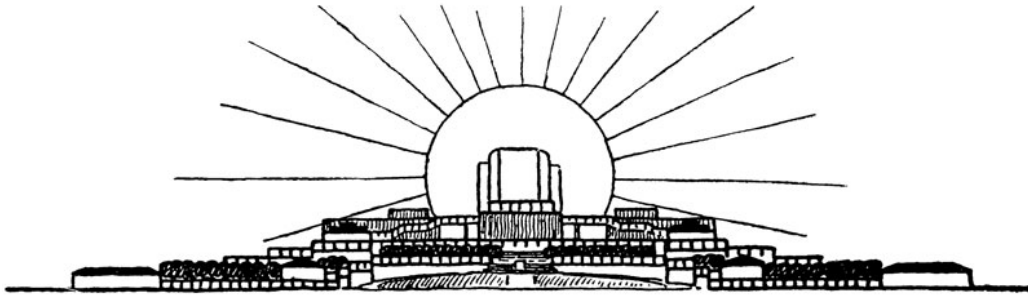


Figure 71: A diagram depicting the concept of a city crown (Photo credit: B. Taut)



Figure 72: A stadkrone in the heart of *Metropolis* (Photo credit: A. Raimist)¹⁴⁰



Figure 73: The Tyrell Corporation, a Stadkrone of the city, *Blade Runner* (Photo Credit: A. Potts)¹⁴¹

Originally constructed in 1972, and later refurbished in both 1997 and 2006, the Peak Tower (Figure 74) is situated 428 meters above sea level and, as sources indicate, is interpreted as the stadkrone of Hong Kong. Despite not manifesting in the same stature and proportion as that of its on-screen counterparts, the core principles exhibited remain the same (Peak Tramways Company Limited, 2023). The peak tower, as its namesake implies, soars over the existing urban landscape of the city, and is the true embodiment of the stadkrone principle, exhibited in the genre of science fiction, as is interpreted by Ceresa, “all these features traced this Asian city of the 1980’s back to the cinematic future metropolis of the 1920’s”.¹⁴²



Figure 74: The Peak Tower, soaring high above the skyline of Hong Kong (Photo credit: Hong Kong Tourism Board)

¹⁴⁰ Universum (UFA). *Metropolis*. 1927

¹⁴¹ The Ladd Company, Shaw Brothers and Warner Bros. *Blade Runner* (1982)

¹⁴² Ceresa, 2017, pp.133-134

Interconnected infrastructure

However, the influence exerted over modern-day architecture by the cinematography of the past, is not solely exhibited by the impending nature of a world encompassing megalopolis, as additional parallels can be drawn between the urban topography of *Metropolis* and that of the real world, in particular, multi-level infrastructure. As stated by Dobraszczyk:

"At the dawn of the skyscraper age many speculated that future high-rise cities would incorporate multiple horizontal levels connecting tall buildings that effectively multiplied what counted as the urban ground"¹⁴³

As a fundamental belief amongst futurists, the architects and art departments of the early 20th century gave birth to the popularisation that the city of the future was intertwined with a collage of roads and bridges, that would unify the urban landscape (Dobraszczyk, 2019) (Figures 75 and 76). Depictions of interconnected cities as the next step in the evolution of architecture, helped to define perceptions of the future surrounding the 1920s and 1930s, and whilst a tapestry of portrayals helped to influence public perception, none more influential than the 1927 motion picture, *Metropolis*. Through the depiction of an urban landscape symbolic of the hierarchy of society, the skyscrapers and sky bridges depicted on screen, served as a platform to spread the vision for the dystopian city of the future to mass audiences throughout the late 1920s (Kracauer, 1947). However, in recent years, Lang's cautionary tale highlighting the consequence of high-rise architecture has become evidently speculated throughout the profession.



Figure 75: An interpretation of the future, (1911) highlighting connectivity at levels (Photo credit: R. Rumell)



Figure 76: A depiction of the future, (1913) demonstrating connectivity at levels (Photo credit: H. Corbett)

"Although high rise living of this kind might not produce the social breakdown predicted ... the tendency towards vertical isolation ... has been shown to be a contributing factor in the dissatisfaction experienced by residents of tall buildings"¹⁴⁴

¹⁴³ Dobraszczyk, 2019, p.122

¹⁴⁴ Dobraszczyk, 2019, p.124

Subsequently, with the increased occurrence of discontent amongst victims of vertical isolation, architecture in recent years has sought to rectify this offence by exhibiting connectivity at levels.

Constructed in 2010, the Marina Bay Sands Hotel (Figure 77) is one of the most iconic example of interconnectivity at levels throughout the 21st century. The overall structure consists of 3 distinct skyscrapers that rise to the height of 191 meters, all unified and interconnected by the distinguished rooftop platform, that spans 120,000m². The structure is home to one of the largest publicly accessible cantilevers across the globe, as the roof deck protrudes from the towers at a distance of 65 meters, creating the unmistakable aesthetic feature of the building. However, despite the fact that the interconnected philosophy of *Metropolis* has been adopted by modern-day architecture, the technological advancement required to implement the ideology across a citywide scale has not yet been utilised to the extent of *Metropolis*'s urban landscape. Furthermore, the innovation required to construct the Marina Bay Sands Hotel was resultant in the expenditure of \$5.7 billion, subsequently, isolating the implementation of interconnectivity within architecture to buildings created for clients of the utmost wealth. However, whilst it might be premature to adapt this concept to the entirety of the current urban landscape, interpretations suggest that the passage of time will allow for Fritz Lang's city of the future to come to life (Heart, 2011).



Figure 77: Marina Bay Sands Hotel (Photo credit: G. Kent)

Alternately, whilst the most notable example, the interconnectivity displayed in the Marina Bay Sands Hotel is seldom an isolated occurrence, as the ideology exhibited by *Metropolis* has been construed and adapted by architects, who whilst envisioned differently, still abide by the principle put forth by Lang. Constructed under the premise of the eradication of neglected infrastructure, the architectural practice of Diller Scofidio + Renfro, captured the essence of multilevel interconnectivity, with their debut of the High Line in 2010 (Figures 78 and 79). The structure redesigned the existing dilapidated remains of a decommissioned railway line and repurposed it befitting of public use, providing a pedestrian exclusive pathway through the urban landscape, elevated above street level. The 1.5-mile expanse of the High Line, traverses through the dense urban landscape of New York and is a staple of the tourism industry that resides in the city, with statistics displaying that an estimated 8 million people attended the landmark in 2022 (Diller, Scofidio + Renfro, 2023). Furthermore, the widespread success of the initiative has been stated to have “stimulated over \$5 billion USD in urban development and created 12,000 new jobs”¹⁴⁵. As a consequence of this, sources claim, “over one hundred cities worldwide have been inspired to transform their obsolete urban

¹⁴⁵ (Diller, Scofidio + Renfro, 2023)

infrastructure”¹⁴⁶, defining the inauguration of multi-level interconnectivity (Diller, Scofidio + Renfro, 2023).



Figure 78: The High line penetrating through the urban landscape (Photo credit: Diller, Scofidio + Renfro)



Figure 79: The High Line (Photo credit: Diller, Scofidio + Renfro)

In recent years the construction of architecture such as the Marina Bay Sands Hotel, and structures, in particular the High Line, have aided in illuminating the public to the benefits of interconnectivity at levels, and through such exposure, have potentially opened the gates for structures of the future to embody the ideology of the 1927 motion picture (Figure 80). In essence, the modern-day display of multi-level interconnectivity across the urban landscape, has aided in fuelling the fires of urban imagination, as sparked by Fritz Lang’s *Metropolis*.



Figure 80: The monolithic infrastructure and interconnectivity of *Metropolis* (Photo credit IMDB)¹⁴⁷

¹⁴⁶ (Diller, Scofidio + Renfro, 2023)

¹⁴⁷ Universum (UFA). *Metropolis*. 1927

Neon Future

Furthermore, alternate concepts as to the future of the urban landscape displayed predominantly in *Blade Runner*, have recently begun to manifest across the architectural cityscape in the form of the envisioned neon future.

The portrayal of 2019 Los Angeles is the embodiment of a city that never sleeps, with the vibrance of the bustling street, matched only by the luminosity of the neon that floods the densely populated urban cityscape. Similar to the concept of urban sprawl, the envisagement of a city lit by the glow of radiant light, was embedded within the design from the early stages of conceptualisation (Ramchurn, 2016) (Figure 82). Deriving from the eastern hemisphere, which inspired much of the aesthetic of the film, it can be inferred that the extensive depiction was an exaggerated enhancement of the street scenes as found in “Tokyo with its hi-tech consumer goods and steamy neon lights”¹⁴⁸. Furthermore, as a consequence of this, it stands to reason that the cities of Asia are the first to exhibit signs of this neon future, as is evident in Tokyo’s Shibuya district (Figure 81). As depicted below, the district of Shibuya can be construed as virtually indistinguishable from that of its cinematic counterpart, with its excessive indulgence of illuminated facades enshrouding the streets below, creating a direct affinity with Ridley Scott’s envisioned future (Ceresa, 2017, p.137) (Figure 83).



Figure 81: The neon streets of Tokyo's Shibuya district (Photo credit: Visualspace)

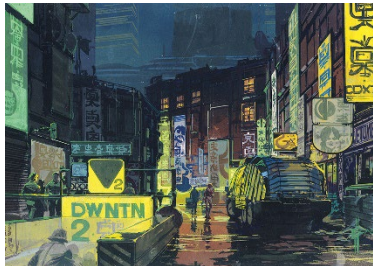


Figure 82: Syd Mead concept art for the neon streets of *Blade Runner* (Photo credit: A. Webster)



Figure 83: The neon streets of *Blade Runner* (Photo credit: S. Vaughan)

However, Tokyo is not an individual proprietor of evoking *Blade Runner*'s portrayal of a neon city, as in 2013, the inhabitants of the city of Beijing undoubtedly laid witness to a scene that was the cinematic depiction of Ridley Scott's dystopian landscape come to fruition. As depicted below in Figure 84, smog throughout the cityscape of Beijing encapsulated a billboard, with illumination protruding through pollution, giving witness to a landscape “uncannily reminiscent of the urban landscape seen in the 1982 film *Blade Runner*”¹⁴⁹ (Figure 85). Subsequently, the exhibition of illumination throughout the eastern hemisphere, aids in the eradication of doubt, that the futuristic portrayal of a neon city, has come into existence (Dobraszczyk, 2019).

¹⁴⁸ (Ramchurn, 2016)

¹⁴⁹ Dobraszczyk, 2019, p.7



Figure 84: The smog filled sky of Beijing creating a dystopian aesthetic (Photo credit: D. Spector)

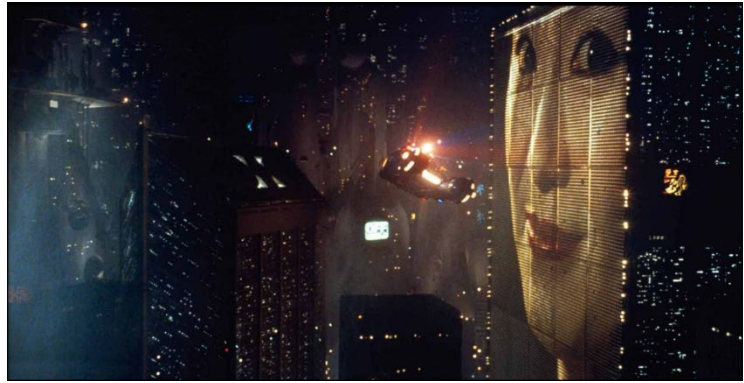


Figure 85: *Blade Runner* neon billboard (Photo credit: D. Spector)¹⁵⁰

The frequent reoccurrence of similarities and parallels that have crossed the boundaries of cinematic fiction and manifested in the urban landscape of modern-day, emphasises the significance and influence that *Metropolis* and *Blade Runner* exerted, on not just the productions of the film industry, but on the profession of architecture throughout the 21st century.

¹⁵⁰ The Ladd Company, Shaw Brothers and Warner Bros. *Blade Runner* (1982)

Conclusion

This chapter will synthesise the primary findings of the document in conjunction with the aims and objectives of the dissertation to establish an overall outcome to the question 'How does film influence perceptions of the architecture and urban landscape of the future? Furthermore, the limitations of the research will also be deduced in addition to providing a proposal for the further research within this field.

From the fruition of cinema the industries of film and architecture have been intrinsically intertwined with each profession aiding in the evolution and development of its counterpart. Therefore, it can be argued that film has had a significant influence on the perception of the future of architecture and the urban landscape.

Contrary to its primitive origins in stage construction, set design over the years has developed and evolved to fulfil its role within cinema. Through the collective use of existing locations, constructed settings and computer generated imagery, set design is primarily unburdened by the constraints that define architecture, subsequently resultant in the industry serving as a laboratory for the architectural portrayals of the future urban landscape.

Furthermore, the potential to create design free from the constraints of the real world architecture romanticises the practice of set design resultant in an affinity between the two industries. The latter of which provides the opportunity to create that would expose the mass audience to radical and new experimental architecture, whilst the former is able to derive inspiration from the on screen portrayal of the future of the urban landscape.

In addition, prior to the inception of cinema, the envisioned portrayal for the future of the urban landscape primarily derived from the ideals and foresight of architects and illustrators. However, the development of motion picture in 1895 provided a further efficient method in which the depictions of the future could be distributed to mass audiences across the globe, which, in conjunction with its ability to portray designs unobtainable in the profession of architecture, was resultant in film subsequently usurping architecture as the primary medium to display the innovative designs for the architecture and urban landscape of the future.

As a fundamental method of portraying the future of the urban landscape, the history of film is a rich tapestry of futuristic portrayals of architectural innovation. However, no two films have redefined the envisaged future like that of *Metropolis* (1927) and *Blade Runner* (1982). The influence of these two aforementioned films can be inferred as immeasurable as the modern-

day urban landscape begins to conform and bring to fruition the predictions of Fritz Lang and Ridley Scott, set forth decades ago.

Subsequently, it is the verdict of this dissertation that throughout the global expanse of cinema and its ability to create structures unbound by the constraints of modern-day architecture, that film is the most influential medium regarding the portrayal of the future of architecture and the urban landscape. However, it must be acknowledged that, in a similar nature to the reasoning in which architecture is reliant on film as a means to evolve and develop, film is reliant on architecture to provide a setting in which to perform. Consequently, resultant in a paradox, in which film cannot evolve without architecture, and architecture cannot evolve without film.

Whilst this dissertation does provide an answer to the question, the author recognises that the conclusion has been drawn from a selective study of work and that additional research within this field would continue to expose further parallels between the professions of film and architecture. The content of this dissertation highlights two case studies, *Metropolis* and *Blade Runner*, regarding their influence on the perception of the future of architecture and the urban landscape, however it is the understanding of the author that the influence film displays on the perceptions of the future is seldom limited to these two case studies.

Subsequently it is the recommendation of this dissertation that for additional development within this area of research, an increased sample size be taken to further solidify the merit of any conclusion deduced.

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Interview with Andrew Li, Art Director, Production Designer, Andrew Li Production Inc on 28 December 2022

Interview with Brad Ricker, Freelance Art Director and Production Designer on 31 January 2023

Interview with Joelle Rumbelow, Freelance Art Director and Set Decorator on 06 February 2023

Appendix A: Questions for Andrew Li, Andrew Li Production Inc

The following questions were asked, during a Zoom conversation, to Andrew Li, Art Director, Production Designer, Andrew Li Production Inc.

The questions were devised by the author of this dissertation.

1. What is the hierarchy of your profession?
2. Why do you think that there has been a significant rise in the use of CGI in recent years?
3. The professions of architecture and set design have a lot of similarities, why do you think this is?
4. In your experience what do you think is the primary role of architecture within film?

Responses were received during Zoom conversation with Andrew Li which was held on 28 December 2022.

Appendix B: Questions for Brad Ricker

The following questions were asked, during a Zoom conversation, to Brad Ricker, Freelance Art Director and Production Designer.

The questions were devised by the author of this dissertation.

1. What process does a design concept go through before it is approved, and who is involved?
2. The professions of architecture and set design have a lot of similarities, why do you think this is?
3. Both Blade Runner and Metropolis have become staples throughout the Science Fiction Genre, more specifically praised for their architectural depictions of the future, why do you think that these portrayals were so popular and successful?
4. What methods of set design do you use? and which do you prefer?
5. In your experience what do you think is the primary role of architecture within film?
6. Do you think that the architecture depicted in films is obtainable in the real world, can you think of any examples?

Responses were received during Zoom conversation with Brad Ricker which was held on 31 January 2023.

Appendix C: Questions for Joelle Rumbelow

The following questions were asked, during a Zoom conversation, to Joelle Rumbelow, Freelance Art Director and Set Decorator.

The questions were devised by the author of this dissertation.

1. What process does a design concept go through before it is approved, and who is involved?
2. The professions of architecture and set design have a lot of similarities, why do you think this is?
3. Both Blade Runner and Metropolis have become staples throughout the Science Fiction Genre, more specifically praised for their architectural depictions of the future, why do you think that these portrayals were so popular and successful?
4. What methods of set design do you use? and which do you prefer?
5. In your experience what do you think is the primary role of architecture within film?
6. Do you think that the architecture depicted in films is obtainable in the real world, can you think of any examples?
7. Do you think that current depictions of the future (specifically architecture) have changed from that of Blade Runner and Metropolis

Responses were received during Zoom conversation with Joelle Rumbelow which was held on 06 February 2023.

Appendix D: Filmography

Back to the Future (1985) Directed by Robert Zemeckis [Feature Film] United States: Universal Pictures, Amblin Entertainment and U-Drive Productions.

Black Panther (2018) Directed by Ryan Coogler [Feature Film] United States: Marvel Studios, Walt Disney Pictures.

Blade Runner (1982) Directed by Ridley Scott [Feature Film] United States: The Ladd Company, Shaw Brothers and Warner Bros.

Brave New World (2020) Peacock, 2 October, 21:00

City of Ember (2008) Directed by Gil Kenan [Feature Film] United States: playtone and Walden Media.

Doctor Strange and the Multiverse of Madness (2022) Directed by Sam Raimi [Feature Film] United States: Marvel Studios

His Dark Materials (2019) BBC One Television, 7 November, 20:00.

Inception (2010) Directed by Christopher Nolan [Feature Film] United States and United Kingdom: Warner Bros, Legendary Entertainment and Syncopy.

Interstellar (2014) Directed by Christopher Nolan [Feature Film] United States, United Kingdom and Canada: Paramount Pictures, Warner Bros and Legendary Entertainment.

Metropolis (1927) Directed by Fritz Lang [Feature Film] Germany: Universum Film (UFA).

One From the Heart (1981) Directed by Francis Ford Coppola [Feature Film] United States: Zoetrope Studios.

Our Blushing Brides (1933) Directed by Harry Beaumont [Feature Film] United States: Metro-Goldwyn-Mayer (MGM).

Our Dancing Daughters (1928) Directed by Harry Beaumont [Feature Film] United States: Metro-Goldwyn-mayer (MGM).

Parasite (2019) Directed by Bong Joon Ho [Feature Film] South Korea: Cj Entertainment and Barunson E&A.

Spider-man: Homecoming (2017) Directed by Jon Watts [Feature Film] United States: Columbia Pictures, LStar Capital and Marvel Studios

Star Wars: Episode IV – A New Hope (1977) Directed by George Lucas [Feature Film] United States: Lucasfilm and Twentieth Century Fox

The Cabinet of Dr Caligari (1920) Directed by Robert Wiene [Feature Film] Germany: Decla-Bioscop AG.

The Grand Budapest Hotel (2014) Directed by Wes Anderson [Feature Film] United States and Germany: Searchlight Pictures, Indian Paintbrush and Studio Babelsberg.

The Shining (1980) Directed by Stanly Kubrick [Feature film] United Kingdom and United States: Warner Bros, Hawk Films and Peregrine.

Toy Story (1995) Directed by John Lasseter [Feature Film] United States and Japan: Walt Disney Pictures and Pixar Animation.

When Ladies Meet (1933) Directed by Harro Beaumont and Rober z. Leonard [Feature Film] United States: Cosmopolitan Productions and Metro-Goldwyn-mayer (MGM).