

The Height of Future Architecture: Significance of High versus Low Rise Architecture in Science Fiction Films

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Abstract: This paper examines the development of the notion of high rise buildings versus low rise buildings in Science Fiction (Sci-Fi) films through the twentieth century and the start of the twenty first century. It traces selected films that are considered important shifts in the depiction of the future city in fictional films. Through the medium of cinema, Sci-Fi films provide a visualization of what cities could turn into in the future. This paper analyses the recurring patterns in the implementation of buildings' heights within the storyboard. It highlights how architecture is used by filmmakers to signify different aspects of the future city through building height. Height is used as strong signifier to portray notions of class divisions and the status of city inhabitants. The paper explores the overlap between contemporary architecture and cinema through an investigation of the role the cities played in the films plotlines. In this premise, the paper aims to describe the role that architecture and its height played in supporting the storyboard. This paper is an attempt to raise theoretical attention towards an understanding of the relationship between architectural characteristics and cinematic space. It can be argued that buildings and their respective heights have been used in Sci-Fi films to convey different messages based on the characters and the psychological and social - as well as the physical - context in which they dwell.

Keywords: architecture, science fiction, skyscraper, vertical, horizontal.

1 Introduction

The silver screen has a long association with architecture and the utilization of architectural signifiers by the directors to convey their personal visions and statements. Architecture in cinema is used as a communication tool through which directors and film makers send certain messages. This is particularly evident through the genre of science fiction films where architectural signifiers depict different aspects of the society, (economical, political, sociological, ecological and technological). Film architecture is an architecture of meaning. There is nothing in the frame that is not important or does not have something to say (Schall, 2000).

2 The Vertical versus the Horizontal

In the 1920s European cities consisted predominately of high density; low-rise masonry housing [Fig. 1] and the high-rise buildings which dotted the skyline of the United States were as yet totally unknown within the continent. As such, it is of interest then as to how Fritz Lang's German future assumed such a strong vertical presence in his 1927 film, *Metropolis* [Fig. 2].

German architectural and urbanistic debates of the 1920s and 1930s are remembered primarily for their focus on the Bauhaus and "the new sobriety of modern architecture", with some much more complex arguments being discussed at the time including: "city vs. country living, industrialization vs. agrarianism, Americanism vs. medievalism." Contemporary German films such as *Metropolis* reflected these debates (Neumann, 1999).

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Fig. 1: Typical view of Germany in 1920s.



Fig.2: "City of the Sons", concept sketch for the *Metropolis* (1927) skyline.

Source: Neumann, D., 1999. *Film Architecture: Set Designs from "Metropolis" to "Blade Runner"*. 1st ed. New York, Prestel

3 The Emergence of the Skyscraper

The question of the skyscraper was taking centre stage in urban debates and widespread doubts about the building form were being perceived. Conservative anti- American architects, planners and journalists viewed this fascinating icon of modernity as nothing more than a "vulgar symbol of rampant capitalism" (Clemens, 2003).

They were referred to as towering monsters, owing their existence to the proliferation of beastly capitalism, assembled in the most chaotic and senseless fashion, clad in luxurious fake architecture, which was far from appropriate for its profane purpose (Neumann, 1999).

Consensus abound, however, that the skyscraper was a logical and essential development of urban city planning and that Germany should build skyscrapers, but only as long as they were different from the American ones. What the German planners called for was a new form of nationalist architecture that would be less historicist and more symbolically and politically powerful than any American skyscraper. A rather large number of such projects were attempted [Fig. 3 & Fig. 4].



Fig.3: Project for federal office building for Berlin, 1920, by Otto Kohtz.



Fig. 4: Project for trade fair tower in Leipzig, by E.Haimovici & R.Tschammer, 1920.

Metropolis, therefore offered a rationalized German critique to the chaotic mess of America's dark city streets. While the old Gothic cathedral at the end of the film clearly identifies the city as German [Fig. 5], it is the central view onto the skyscrapers and the new spirituality of the dominant central tower that makes this a pessimistic re-interpretation of the modern city. By personifying skyscrapers with the status of film stars, *Metropolis* succeeded in elevating the debate about monumentality and the high-rise to a new international level. The film had an almost immediate impact on urbanistic visions portrayed in other films and in popular culture, where the debate openly continued (Neumann, 1999).

4 The Science Fiction City

Tracing the development of the 'science fiction city' throughout cinematic history in terms of the vertical and the horizontal, it is discernible that prior to the 1950s, it was "the vertical, lofty and aerial quality of the city" of such films as *Just Imagine* (1930) and *Things To Come* (1936), rather than the city's pedestrian and base horizontality, that was being highlighted.

Indeed, the prevalent Modernist society of the period equated “height” with the active reach of human aspiration, and “the loftiness” of the city as its most aesthetically significant social value.



Fig. 5: The final seen of the Cathedral in Metropolis (1927).

Cultural geographer Yi-Fu Tuan explains: “The vertical versus the horizontal dimension? [A] common response is to see them symbolically as the antithesis between transcendence and immanence, between the ideal of the disembodied consciousness (a skyward spirituality) and the ideal of earth-bound identification. Vertical elements evoke a sense of striving, a defiance of gravity; while the horizontal elements call to mind acceptance and rest.”

The science fiction city of the late 60s to the 70s poeticized neither highness nor fullness as positive values. On the contrary, both types of signifiers reflected a perceived sense of negativity in which cities have “turned in on themselves to become lowering oppressiveness and overcrowded” (Sobchack, 1999).

Indeed, if the utopian science-fiction city is perceived as aspiring, then the science fiction city during this period is dystopian and perceived as asphyxiating.

In the science fiction films of the 70s, visual horizontal elements juxtapose the less positive modes of existence: resignation, stasis, asphyxiation and death; with more positive active modes: expansion, dispersion and play. The *Soylent Green* (1973), visualizes a New York City that no longer aspires but suffocates and expires. Emphasis is not on the height of buildings but on their baseness. Verticality is no longer significant- and the city's horizontal dimension stresses its limitations, not its openness (Sobchack, 1999). [Fig. 6]



Fig.6: The horizontality in Soylent Green (1973), emphasis on the limitation.

By the 80s, the idealized and lofty science fiction city is imagined as completely decentred and marginalized. The postmodernist city has no centre, it is all centre or else all decentred, dispersing its activities in all directions. This is evidenced by the fact that despite having record breaking skyscrapers, the Los Angeles of *Blade Runner* (1982) has little to do with verticality and lofty aspiration. The “trajectory of our attention tends to stay grounded” (Horsley, 1994). This LA is literally exhausted, generating “the strange blend of hysteria and euphoria” that comes with utter fatigue.

In the 90s urban science fiction assumes another dimension: the city here is not only “grungy” like Ridley Scott’s Los Angeles but also bottomless and, in various ways, unfathomable. In *Dark City* (1998) the entire plot specifically emphasizes and visually “concretizes the rootless, vertiginous and insecure sense that the city is groundless in both time and place” (Sobchack, 1999).

In *The Fifth Element* (1997) buildings’ tops and bottoms recede into invisibility [Fig. 7]. This dizzying and densely layered labyrinth of architecture and motion; it is neither skyscraper (there is no visible sky as such) nor ground.



Fig.7: The unfathomable depth of the city in *The Fifth Element* (1997). There is no sky, and there is no ground.

In the future cities of the late 90s, such as those experienced in *Dark City* (1998) and *The Matrix* (1999) invisible forces render the metropolis liquid, literally dissolving and coagulating it in front of the viewer's eyes. This is attributed to a general loss of existential co-ordinates experienced in the contemporary metropolis.

In *Equilibrium* (2002), the role of verticality comes with a political significance. Visual effects supervisor Tim McGovern worked alongside Kurt Wimmer and Wolf Kroeger to formulate the look of the walled Librian metropolis. McGovern, who won an Oscar for *Total Recall* (1990) started with a theme of grandiosity. He explains: "The whole idea of fascist architecture is to make the individual feel small and insignificant so the government seems more powerful and I continued that design ethic in the visual effects [Fig. 8]. For example, Libria is surrounded by a seventy-five feet high wall, the walls just keep going on and on and use vertical and horizontal lines in a Mondrian-type way" (Momentum Pictures, 2002).



Fig. 8: The insignificance of the people in the fascist city of Libria is emphasized by the grandiosity of the buildings surrounding them (*Equilibrium* 2002).

5 Classes Division & the Architecture of Status

Despite the promise of greater efficiency and more goods for less work, the machine age has proven that relatively few people benefit from the apparent advantages of mass production. The fruits of a capitalist society are not shared equally; it is the factory owners and investors who reap most of the economic gain. As production becomes more efficient and automated, fewer workers are needed, and therefore, lower wages are implemented. The process results in a state of industrial poverty and the stratification of society which in turn leads to social animosity. Thus, the metaphorical machine for living seems to be designed to maximize the profits of the capitalist rather than to provide a better standard of living for the workers (Smethurst, 2003).

The conflict of class and its architectural manifestations are most strongly pronounced in Fritz Lang's *Metropolis* (1927). In the film there is a clear separation between the workers' city found deep underground [Fig. 9], and the Edenic pleasure garden environment enjoyed by the elite in their skyscrapers [Fig. 10]. Each citizen's place in the social hierarchy is expressed in physical terms by the level of the city in which they live: workers at the very bottom, the rulers at the top, and the machine in between. The elimination of contact between the different layers of the city removes the possibility of communication, and further aggravates the social divide (Jin, 2003).

Status is understood through the types of architecture the characters inhabit. The offices and apartments of the "Thinkers" are inspired by the then brand new Art Deco style, and also infused with an air of De Stijl. Underground, in the workers' city, there is an obvious difference in the architectural setting. Masses of workers and children dwell in the depths of the earth, forever bound to a life under sewer systems and water supply pipes. Here in the narrow sunless streets, life is crowded and undesirable. Buildings are twisted and monumentally scaled, windows too small, ceilings oppressively low, interiors devoid of any comfort and a feeling of claustrophobia prevails. Everything is dark, dreary, and deprived of emotion. A kind of



Fig. 9: The Workers' Underground City (*Metropolis*, 1927).



Fig. 10: The City of the Sons, from above (*Metropolis*, 1927).

prison at the scale of the city (Boake, 2003). This mindless world of discipline and duty is almost like a “gigantic forced labour camp cunningly disguised as a society” (Hermansson, 2003). [Fig. 11 and Fig. 12]



Fig.11: “In the Elevator” concept drawing for *Metropolis*, (1927).



Fig.12: Freder works the machine (*Metropolis*, 1927).

The cityscape in *Metropolis* is divided between high and low: the city dwellers who live above the ground are contrasted to, and in conflict with, those who dwell beneath the streets. This dialectic above/below corresponds to a difference in class. The workers labour below; the upper classes who benefit from their labour frolic above. Scenes of upper-class life revolve around pleasure, while scenes of the workers reveal mechanized, depressed figures who seem barely human. Lang envisioned the high vs. low, upper class vs. working class dichotomy as inevitable, but not necessarily inevitably in conflict (Desser, 1999). The biblical associations abound, with the workers toiling away in Purgatory on gigantic machinery, surviving despite back-breaking labour and regimented assembly-line work; and the masters enjoying the benefits in the above ground Paradise city that the machine supports (Smethurst, 2003). The biblical association is carried further throughout the film, with direct references being made to the Tower of Babel story [Fig. 13]. The story of Babylon is the universal symbol of man equating himself with God through built form (Boake, 2003).



Fig.13: The Tower of Babel (*Metropolis* 1927).

The film thus foreshadows what would happen if industrialization was allowed to go too far. The tower of the scriptures was essentially built by the many for the piety of the few. The implication is that the city is also a modern Babel, built by the workers for the benefit of the few.

The world of *Metropolis* shares something with that portrayed by H.G. Wells' great science fiction adventure novel, *The Time Machine* (1895). While on the surface the world of the year 802,701 (just like the City of the Sons, in *Metropolis*) appears to be a beautiful utopian-like society that wants for nothing. However, the Time Traveler soon realizes that things are not as they seem. An excessive capitalistic state which separated the haves and the have-nots, through the slow process of evolution, has resulted in the creation of two new species, thus perpetuating the class war. The descendants of rich capitalists, The Eloi, live above ground leading a leisurely existence in a kind of paradise while the descendants of the factory workers, the Morlocks, exist below the surface, running the machinery necessary for the Eloi to survive. Lang's film seems to be showing the early stages of this dichotomy. However, while Wells' approach is essentially Marxist, Lang's is the direct opposite, preaching not Marxist inspired class warfare but a non-violent religiously inspired reconciliation between the classes (Kuhn, 1999).

To help understand why the city in *Metropolis* (1927) is depicted in this fashion, there are a number of aspects to keep in mind about the environment in which the film was produced. Germany at the midpoint between World War I and World War II, was a country where manufacturing was still the king of the economy, even though the economy itself was "in shambles, inflation was out of control and the National Socialist, or Nazi, party was starting to come to prominence". However, the majority of the wealthy Germans lived high above the poverty of the common citizen. *Metropolis* thus tried to portray the city that might have risen from Germany's despair, and it has very often been considered to be just an elaborate piece of Nazi propaganda. In fact, the film was much loved by Hitler and Fritz Lang was even offered a job creating films for the Third Reich. Lang, being half Jewish, however, refused the offer and escaped to the United States where he continued his successful career (Swett, 2001).

If *Metropolis* (1927) attempted to create a German response to the skyscraper, *Just Imagine* takes the skyscraper to its most American incarnation. The set-back skyscraper of the 1920s was a direct result of the New York Zoning Laws of 1916. While Hugh Ferriss (1929) attributes the evolution of this form of high-rise to the solution of the oppressive shadowing of whole neighbourhoods by adjoining skyscrapers; the architectural historian Francisco Mujica argues that the similarities of such buildings to Mesoamerican pyramids makes them distinctly and historically American (Neumann, 1999).

Ridley Scott's *Blade Runner* (1982) like *Metropolis* (1927) reveals class structure through its vertical architecture. The film accepts street-level squalor as a given, and attempts to expose the vertical corruption inherent of utopian societies gone awry. The wealthy and affluent rule in their Paolo Soleri inspired Archologies, while "the poor swarm in seemingly subterranean warrens". Unseen, but alluded to, is a third area in the film: the 'off-world' colonies. Only those who qualify are relocated to the colonies, leaving behind, in the cities, those who are beyond redemption (Bullock, 1991).

The figuration of racism in *Blade Runner* translates into the high/low spatial metaphor present in *Metropolis* and other films. The replicants and the people of colour inhabit the teeming, rain-soaked streets, as police craft hover above giant television screens beaming down their audio-visual messages to a population which cannot take advantage of the advertisements' promises of a better life off world. Deckard, the blade runner assigned to kill a group of replicants, similarly lives high above the crowded streets, protected by ultra-modern security devices and other high-tech equipment. Highest of all, though resides Eldon Tyrell, technocrat extraordinaire and Master of LA's Metropolis, in a pyramid some seven hundred storeys high (Desser, 1999).

Far above the decadence of the streets are the peaks of skyscrapers. In these high places, detached from the world below, live the elite privileged by the illumination of a still discernible sun. The grandiose solemn interior of Tyrell's Office [Fig. 14] is intended to have a Neo-Fascist and almost Gothic look to physically strike fear in the visitor. With ten meter high columns and huge windows that overlook the cramped streetscape of the lower class, Tyrell's spacious office symbolizes the power of the capitalist over the workforce below (Lam, 2003).



Fig. 14: Tyrell's office: frightening scale and power. The only place in the city that can still see the sun (*Blade Runner*, 1982).

Architecture and its association with capitalist status is also represented in *The Fifth Element* (1997). The tower Zorg inhabits [Fig. 15] represents a literal translation of being at the top of the hierarchy. Unlike the Tyrell Corporation's Ziggurat or The New Tower of Babel; Zorg's tower, however, does not take up a central and dominating position. The building is one of the tallest in the city but not the most prominent. In fact, the New York of 2259 seems to lack such a central vertical element.



Fig. 15: Zorg's tower reaches into the New York sky (*The Fifth Element*, 1997).

The *Batman* films (1989 - 2005) point to a continuing thread of corruption in 'high places'; referring both to the habitual action of villains to establish their bases of operation in penthouse lofts. Gotham Cathedral's central location within the cityscape symbolizes the importance religion must have once possessed in the city. The dark silhouette of the Cathedral looms in the lit up skyline as a reminder of the forgotten values of a now predominately capitalist and corrupt society [Fig. 16].



Fig. 16: The Cathedral in Gotham City as the center of the cityscape symbolizes the importance religion must have once possessed in the city (*Batman* 1989).

The paradigm of architectural spatial patterning representing the above/below is transformed in the 1971 film *THX-1138* into the inside versus the outside. The totalitarian computers which seem to run this colorless future culture have decreed that its citizens must live inside a protective shell, outside which there is nothing but desolate waste. This concept of a shell, literalized on the spatial level with its stark white, empty interiors and, a total absence of exterior space, is symbolized on the social level [Fig. 17].

The citizens are completely cut off from genuine emotions and personal connections, isolated by drugs and constant computer monitoring. Names have been replaced by letters and numbers; conformity is ensured by physical resemblance - all the inhabitants have shaved heads and wear stark white uniforms. All differences - of class, race and gender have thus been eliminated. To assert difference is to take the first step towards rebellion (Desser, 1999).

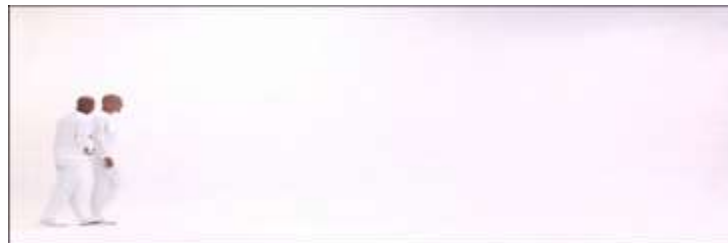


Fig. 17: The stark white empty interiors in *THX-1138* (1970), emphasis the social status of its inhabitants.

The monochromatic approach to architectural colour in *THX-1138* was taken to its extreme in *Equilibrium* (2002) with the addition of a political agenda. Libria is a stark, black-and-white (colour, after all, evokes feelings) metropolis [Fig. 18], which is run by a mysterious dictator named the Father who wields power through a group of Ninja-like "clerics" who enforce his vision of peace through the chemical control of all emotion.



Fig. 18: The stark, black-and-white buildings of Libria revealing a community deprived of all its feelings (*Equilibrium* 2002).

Equilibrium presents a vision of a world at peace, with a tremendous human cost. This is a world where war is a distant memory, yet where there is no music, no art, no poetry, where anyone who partakes in such banned activities is guilty of a "Sense Offence," a crime that carries a death sentence. It is a world where the age-old question "How do you feel?" can never be answered because all feelings have been shut out. The bland-hued architecture of the city of Libria reveals a society deprived of its emotions [Fig. 19]. On the other hand, the Father inhabits a fully decorated, coloured, and ornamented house contrary to the houses of his people who are not allowed to use colours or any artefacts, as it signifies the existence of feelings among them [Fig. 20]. The whole architecture of the film resembles a fascist political state (Momentum Pictures, 2002).



Fig.19: The minimalistic monochrome interiors of people of the city of Libria (*Equilibrium* 2002).



Fig.20: The colorful and decorated place where the dictator of the city stays is the opposite of that of his people (*Equilibrium* 2002).

6 Architecture, Control and Manipulation

The modern city is perceived in science fiction films as a labyrinth with a mastermind-like power lying unseen at its centre. The Master's power to control events is inversely proportional with the citizens' capacity to perceive what is happening. The grip of such a society on its citizens is embodied in the controlling and moulding effect of the city's architecture, achieved through a twisted reversal of the ideals of Architectural Determinism (Lyssiotis and Mcquire, 2000).

The large and ominous buildings in *Brazil* (1985), for example, seem to engulf and stifle their human counterparts. In some respects, the external world tries to force control on the internal world of the mind (Hamel, 1998). The ducts are interpreted as an umbilical link between the civilians and their centralized government; they are a clear symbol of the internal complexity and lack of organization of the modernist machine.

In *Blade Runner* (1982) the physical exposure and vulnerability of street level space makes it a realm where people are unable to see and know, or to escape being seen. In *Things to Come* (1936) control is achieved through stylistic uniformity. Meant to convey a sense of order, efficiency and peacefulness; the unity of form and finish, the blankness of the buildings, the uniformity of dress, and the lack of vitality on the streets; are all evidences of a social system that favours the collective over the individual. The overwhelming artificiality of Everytown creates an environment where everything is closely controlled and monitored.

In *Equilibrium* (2002), the city of Libria [Fig. 21] presents a controlled state taken to its extremes. The emotion suppressing state's agenda is clearly expressed through the city's architecture. Buildings, like the people that inhabit them are faceless and devoid of any feeling. The fascist's states media manipulative machine is inbuilt into the infrastructure of the city: giant billboards overtake whole build facades, and loud speakers that air a constant stream of propaganda are located at every corner (Spicciati, 2002).



Fig. 20: Libria: a fascist state where all citizens are rendered emotionless by the state (*Equilibrium*, 2002).

7 Conclusions

This paper provides a considerable insight into of the significance and motives behind the architectural elements implemented in science fiction films. It is evident that the altitude of buildings acts as an architectural signifier and as a metaphor for both the social status of the members of the society, and as a metaphor for the struggle between the rich and poor, the haves and have-nots, and the thinkers and the workers. A noticeable recurring trend is that the elite of the society inhabit the upper part of the city buildings and live in compositions of large geometric forms, while the lower classes inhabit the lower parts of the city.

Regardless of the status of the protagonists in science fiction films, the places where they live and work portray a lot about their personalities starting from social status to their ideologies and mental state. However, the architectural style remains the main signifier used by filmmakers to convey the real personalities of the protagonists. Throughout the history of science fiction films it is the modern style that always accompanies the dominant personalities and is used as a signifier for the state of imprisonment and entrapment the protagonists suffer, while the vernacular and classical styles accompany those of a lower status.

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