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SET DESIGNS OF EARLY SCIENCE FICTION MOVIES AS AN ARCHITECTURAL AVANT-GARDE

SCENOGRAFIE WCZESNYCH FILMÓW FANTASTYCZNONAUKOWYCH JAKO AWANGARDA ARCHITEKTONICZNA

Abstract

The subject of the article are the set designs of early science-fiction movies and their cultural, philosophical and social meaning. The article attempts to present the buildings that exist only on the silver screen as avant-garde; manifestations of architects' dreams from a specific period of time. This text focuses on four films from the interwar period, which carry strong proximity to the contemporary architectural ideas: Protazanov's "Aelita", Lang's "Metropolis", Capra's "Lost Horizon", and W.C. Menzies' "Things to Come". Through their critical analysis, the relationship between the postulates of the emerging modernist architectural movement and scenography is shown.

Keywords: set design, avant-garde, cinematography, fantasy, architecture, film

Streszczenie

Tematem artykułu są scenografie wczesnych filmów fantastycznonaukowych oraz ich znaczenie kulturowe, filozoficzne i społeczne. W artykule podjęta zostaje próba przedstawienia istniejących wyłącznie na srebrnym ekranie budynków jako awangardy; manifestacji często nieziszczalnych marzeń architektów, żyjących w konkretnym okresie czasu. Niniejszy tekst koncentruje się na czterech filmach z okresu dwudziestolecia międzywojennego, wykazujących szczególnie bliski związek z ówczesnymi ideami architektonicznymi: *Aelicie* Protazanowa, *Metropolis* Langa, *Zaginionym Horyzoncie* Capry oraz *Rzeczach, które nadejdą* W.C. Menziesa. Poprzez ich analizę krytyczną ukazany zostaje związek między postulatami rodzącego się architektonicznego ruchu modernistycznego i twórczością scenograficzną.

Słowa kluczowe: scenografia, awangarda, kinematografia, fantastyka, architektura, film

1. INTRODUCTION

The English word "avant-garde" comes from French and describes the front part of a marching army; scouts who were sent to unfamiliar territory¹. It is hard to find a clearer metaphor

¹ H. Heynen, *Avant Garde* [in:] *Encyclopedia of Twentieth Century Architecture, Volume I, A–F*, S. Sennott (ed.), Fitzroy Dearborn, New York–London 2004, pp. 97–98.

of new trends in art, which completely break with the past and which, from the 19th century onwards, captured the imagination of influential intellectuals². Artistic creativity, so far focused on providing the society with aesthetic or intellectual experiences as a result of a sudden revolution, turned into – as Marinetti wrote in the Manifesto of Futurism – “a violent attack on unknown forces in order to throw them under the feet of man”³.

Painting, sculpture, literature and film underwent major transformations and architecture also followed the trend. However, the avant-garde, which constantly stands up to tradition, institutions and the established order⁴, has taken a surprising form in this area. In many cases, instead of enhancing the expression of forms, attacking the recipient with aggressive colors or disturbing symbolism, architects simplified their designs to the maximum, emphasizing their purity and functionality.

The modernism born at the beginning of the 20th century is so strongly identified with avant-garde architecture that in some publications these terms are used interchangeably as synonyms⁵. Hilde Heynen, however, is against such a generalization – in her opinion, “architectural avant-garde” is a narrower concept which can only be used to define certain areas of modernist movement⁶. Soviet constructivism or late expressionism are, according to the researcher, good examples of trends that meet the criteria of “avant-garde”, because they present a strong criticism of the existing order and a desire to look for completely innovative solutions⁷.

Interestingly, both German expressionism and Soviet constructivism left a legacy also in the set design of science-fiction movies. This area, often overlooked in the study of architectural forms, perfectly highlights the fears and desires of the society functioning in a given period of time⁸. By talking about the future emerging from the contemporary interests, science fiction cinema perfectly emphasizes the “spirit of the time”⁹. The conducted research proves that the form, free from the constraints imposed by construction or economy, can fully make the dreams of its creator come true.

Because of that, the authors of this study decided to look for motifs in the world of movie set design that would qualify it as avant-garde art. The aim of the following study is to highlight the philosophical and aesthetic connections between cinematography and architecture in specific period of time. Taking into consideration the definition of the avant-garde presented by Hilde Heynen, the authors decided to focus on the interwar period, when modernism was beginning to take on a revolutionary character. The criterion for selecting four film examples, which were subjected to a detailed critical analysis in the following text, was, on the one hand, the time of creation, and on the other, a particularly close relationship with the ideas of the modernist architectural avant-garde. The research proved that both areas were connected in a complex and multidimensional manner.

² *Ibidem*.

³ F.T. Marinetti, *The Founding and Manifesto of Futurism*, [in:] “Futurism: An Anthology”, L. Rainey, Ch. Poggi, L. Wittman (eds.), Yale University Press, New Haven–London 2009, pp. 49–53. pp. 49–53.

⁴ H. Heynen, *op. cit.*

⁵ A. Colquhoun, *Modern Architecture*, Oxford University Press, Oxford, New York 2002, p. 9.

⁶ H. Heynen, *op. cit.*

⁷ *Ibidem*.

⁸ Z. Konopacki-Maciuk, *Representations of the City in Science Fiction Cinema*, “Technical Transactions: Architecture” 2012, t.1-A/1/2012, pp. 413–425.

⁹ *Ibidem*.

2. FILM ARCHITECTURE AND THE PROBLEM OF SOCIAL INEQUALITIES – “AELITA” AND “METROPOLIS”

In the introduction, we noted that one of the most important features of the avant-garde is disagreement with the existing reality and a radical attempt to change it. Sudden, not evolutionary, solutions are sought, and it is proposed to reject the existing achievements in order to create something completely new. Therefore, we will start our search with two films which deal with the problem of revolution not only in terms of aesthetics, but also in terms of plot and philosophy. “Metropolis” by Fritz Lang and “Aelita” by Protazanov, although thematically convergent, differ entirely in their message. This fact is related to the various political realities in which these works were created – “Metropolis” is a production shot in the still democratic Weimar Republic (Hitler will take power here after a few years), while “Aelita” is a flagship example of a propaganda film which purpose is to cement the Bolshevik system in the post-revolutionary Russia.

Both works share modernist aesthetics; the scenography is based on the latest architectural achievements. The steel trusses from “Aelita” are reminiscent of Tatlin’s “Monument to the Third International”, clearly referring to the projects of Soviet constructivists. Taking inspiration from the architecture of New York¹⁰, “Metropolis” is, on the other hand, a film monument of the art deco style.

In both cases, social inequalities lie at the root of the dramatic events. In “Metropolis”, we observe the capitalist city of the future, in which the working-class lives underground, completely cut off from the daylight. There, it produces goods for entrepreneurs who occupy luxury apartments in the upper city. “Aelita”, on the other hand, shows us a feudal Martian society, a metaphor for tsarist Russia, in which proletarians live in barred caves, and monarchs occupy eccentric palaces.

Cinema of the time was especially sensitive to the needs of the poorest. This fact is undoubtedly connected with the extremely difficult situation which they were facing at the beginning of the 20th century. It is hard to ignore the well-known anecdote about Fritz Lang, who found 750 malnourished children on the streets of his hometown during the production of “Metropolis”, who were ready to shoot dangerous scenes in cold water for a nominal fee¹¹. It is also hard not to be scared by the information that in 1911 there were an average of 10 people per apartment in Łódź, with one-room apartments constituting as much as 66% of the total¹².

Social dissatisfaction with the difficult financial situation was presented in a very interesting way in “Aelita”. When the Bolshevik Gusev, who came from Earth, begins to tell Martian proletarians about the October Revolution, his story is visualized in the form of a cluster of images that has much in common with the associative montage invented by Eisenstein. Viewers can see a strongman who breaks the chains symbolizing bourgeois enslavement and then uses a huge hammer to destroy models of historical, architectural details – a fragment of a staircase with a balustrade based on balusters, a window with an eclectic frame and an Ionic column.

¹⁰ J. Haines, *Music in Films on the Middle Ages, Authenticity vs. Fantasy*, Routledge, New York 2014, p. 33.

¹¹ W. Orliński, *Metropolis zmienia kino i świat*, “Gazeta Wyborcza”, 3.04.2008, <https://wyborcza.pl/7,75410,5086108.html> (access: 3.08.2022).

¹² K. Śmiechowski, *Warunki mieszkaniowe robotników na łamach „Gońca Łódzkiego” (1898–1906)*, “Studia z Historii Społeczno-Gospodarczej XIX i XX wieku” 2012, t. 10, pp. 105–120.



Ill. 1. “The Hammer of Revolution” breaks down models of historical, architectural details in Protazanov’s “Aelita”¹³.

This scene clearly shows the relationship between social ideas and the decoration of buildings. The architectural detail is presented as an unnecessary excess of the rich, while millions of people suffer from scarcity. Ornament is a crime, not because “it does not evoke any lustful feelings, just as a tattooed body no longer evokes aesthetic delight as among Papuans”¹⁴. Ornament, according to the creators of “Aelita”, is completely irrelevant, and at the same time consumes energy and resources that could be used to help the poorest. It is difficult to outline the revolutionary character of the early modernist avant-garde more clearly.

The agitation described above is of course effective, and the Martian proletarians storm the court of Queen Aelita, just as their earthly companions once attacked the Winter Palace. In Protazanov’s opinion, social justice can only be evoked through bloody riots.

However, Fritz Lang does not agree with this claim, as in his “Metropolis” he presents completely different views, stemming from the Christian tradition. The key symbol of the film, the Tower of Babel, appears both in the form of a reproduction of a painting by Pieter Bruegel the Elder, and a state-of-the-art skyscraper towering over the city. Invoking this allegorical motive, as in the case of the Flemish painting, becomes a commentary on the current condition of society. According to Barbara Kamińska, Bruegel referred in his work

¹³ J. Protazanow, *Aelita*, Mezhrabpom-Rus, ZSRR 1924, set design: Nadieża Łamanowa, <https://archive.org/details/AelitaQueenOfMarsoriginalVersion>, frame chosen from the movie (access: 20.08.2022).

¹⁴ A. Loos, *Ornament i zbrodnia* (1908), <http://teoriaarchitektury.blogspot.com/2010/10/adolf-loos-ornament-i-zbrodnia-1908.html> (access: 20.08.2022).

to a horse parade presenting various social groups inhabiting Antwerp, which was to pass through the streets of the city¹⁵. Individual nations competed so fiercely for honorable places at its front that the ruler himself had to intervene¹⁶.

In the case of “Metropolis”, the symbolic commentary is also directed towards current problems. As the preproduction sketches show, Lang deliberately removed all references to religion from the city’s broad plans¹⁷ to emphasize the fact that the builders of the city of the future, like the makers of the Tower of Babel, opposed the virtues of faith and humility.



Ill. 2. A contemporary vision of the Tower of Babel in Fritz Lang’s “Metropolis”¹⁸.

In this way, he referred to the modernist urban concepts, popular at the time of the film’s making, such as Bruno Taut’s “Stadtkrone”. In the architect’s vision, the modern city was to be dominated by a system of green areas, cultural institutions and meeting houses¹⁹. The secular symbol of socialist ideals would replace the town hall or church towers in the silhouette of the city, and “social thought” would become a “new form of Christianity”²⁰. The

¹⁵ B.A. Kaminska, “Come, let us make a city and a tower”: Pieter Bruegel the Elder’s *Tower of Babel* and the Creation of a Harmonious Community in Antwerp, ”Journal of Historians of Netherlandish Art” 2014, t. 6, no 2, pp. 5–10.

¹⁶ *Ibidem*.

¹⁷ D. Neumann, *Film architecture: Set designs from Metropolis to Blade Runner*, Prestel, New York 1996, p. 97.

¹⁸ F. Lang, *Metropolis*, UFA, Weimar Republic 1927, set design: Otto Hunte, Erich Kettelhut, Karl Vollbrecht, <https://archive.org/details/Metropolis1927EnglishVersion>, frame chosen from the movie (access: 20.08.2022).

¹⁹ M. Mindrup, *Introduction: Advancing the Reverie of Utopia* [in:] *The City Crown by Bruno Taut*, M. Mindrup, U. Altenmüller-Lewis (eds.), Routledge, London–New York 2015, pp. 16–31.

²⁰ *Ibidem*.

ultramodern skyscraper with a squat silhouette is, on the one hand, a reference to the Tower of Babel, and on the other – the embodiment of the most modern architectural concepts at the time of the film's creation.

According to Lang, these two areas are surprisingly similar, so in his film he presents a further development of the biblical parable. The Old Testament God punished the constructors of the Tower of Babel by confusing their languages and making communication impossible, so in the futuristic film version of the parable, the punishment for pride will also be a lack of communication. However, not national, but wealth differences will become the source of conflict in the case of “Metropolis”. As in “Aelita”, there will be a clash of conflicting social classes, and the rebellious workers, destroying machines like the British Luddites, will threaten the entire city. When the situation seems tragic, an agreement will be reached on the stairs of an abandoned Gothic cathedral, and the audience will hear the famous phrase – “the mediator between the head and hands must be the heart”.

It is not brutal violence, but Christian mercy that is, for Lang, a recipe for the problem of social inequality. The Gothic cathedral, on the other hand, is a “medieval refuge from the nightmare of modernity”²¹, progressive architectural and social ideas are a threat to humans. In Lang's opinion, the modernist avant-garde should revise its goals in order to actually bring people happiness and peace – care for the poor cannot manifest itself in destroying the achievements of the richest. The bully from “Aelita” in “Metropolis” would not destroy the historical details with a hammer, but he would appreciate their beauty and cultural importance.

3. ARCHITECTURAL UTOPIAS OF THE INTERNATIONAL STYLE – “LOST HORIZON” AND “THINGS TO COME”

“Aelita” and “Metropolis” perfectly show how the architectural avant-garde becomes part of a wider social revolution. The upcoming changes arouse fear among some directors, while filling others with hope. However, both films do not show the ultimate goal of the transformations, the plots end immediately after the riots end. The answer to the question of what the world transformed by modernists will look like can be found in two other films, produced a few years before the Second World War – “Things to Come” by W.C. Menzies and “Lost Horizon” by Frank Capra. Both productions belong to the extremely rare science fiction subgenre – utopia. However, the most interesting fact is that, similarly to the two productions described in the previous chapter, both movies were created by directors with a completely different sensitivity. Herbert George Wells, the author of the novel which was used as the main storyline for the film “Things that will come” and co-creator of the film, identified himself with the leftist organization “Fabian Society”²², while Frank Capra was a supporter of the political right²³.

As Ditrich Neumann notes, the plot of 1936 “Things to Come”, dealing with a great war and the reconstruction of the destroyed world from the ruins, undoubtedly has a prophetic

²¹ J. Haines, *op. cit.*, p.33.

²² G.D. Feir, *H.G. Wells at the End of His Tether: His Social and Political Adventures*, iUniverse inc., New York 2005, p. 64.

²³ B.L. Alpers, *Dictators, Democracy, and American Public Culture: Envisioning the Totalitarian Enemy 1920s–1950s*, The University of North Carolina Press, Chapel Hill–London 2003, p. 114.

dimension²⁴. However, this is not the only area in which the film surprises with its precognition; it also predicts that the world will be rebuilt in the spirit of modernism, which, taking into consideration the popularity of the international style in the post-war years, was also the case. The production shows in detail the process of building the “city of tomorrow’s community”; viewers can see how concrete slabs are made in huge factory halls, and observe futuristic machines assemble them in minimalist buildings.



Ill. 3. Installation of buildings from prefabricated concrete elements in the film “Things to come”²⁵.

Despite the fact that the first building made in a similar technology is the casino in Biarritz²⁶, the inspiration for the film should be sought elsewhere. The filmmakers tried to make Le Corbusier responsible for the visual side of the city of the future, and when their efforts proved unsuccessful, the film’s set designer, Vincent Korda, created the world of the future based on the architect’s ideas²⁷. These certainly included those from the book “Towards Architecture” – “Big industry must deal with construction and implement serial production of house components. We have to create the spirit of serial production, the spirit of mass production of houses, the spirit of life in serial houses, the spirit of creating serial houses”²⁸.

²⁴ D. Neumann, *op. cit.*, p. 118.

²⁵ W.C. Menzies, *Things to come*, London Film Productions, Great Britain 1936, set design: Vincent Korda. https://archive.org/details/ClaCinOnl_ThingsToCome, frame chosen from the movie (access: 20.08.2022).

²⁶ G. Adamczewski, P. Woyciechowski, *Prefabrykacja w XXI wieku*, “Inżynier Budownictwa” 2015, no 4, pp. 54–58.

²⁷ D. Neumann, *op. cit.*, p. 119.

²⁸ Le Corbusier, *W stronę architektury*, Fundacja Centrum Architektury, Warszawa 2012, p. 251.

Of course Corbusier did not stop at the theory alone; in 1914 he designed the Domino building, becoming a precursor of the so-called large concrete prefabrication²⁹. Interestingly, the revolutionary concept, similarly as in the film “Things to come”, was created to reconstruct the world turned into ruins through military actions. Corbusier’s idea arose as a result of the search for methods to quickly restore Flemish villages destroyed during the First World War³⁰.

The world rebuilt in the spirit of the modernist avant-garde, which in the assumptions of Herbert Georg Wells should be regarded as a utopia, for many viewers could, however, turn out to be the fulfillment of the worst nightmares. As in Corbusier’s famous “Voisin Plan”, which involves the demolition of much of the Paris’ historical architecture, the reality of “Things to Come” has been completely purified from history and tradition. The buildings that had survived the conflagration of the war were removed in the film, and the children learned about the old towns only from the archival film materials.

According to Wells, the new man has to be guided solely by reason; in the original novel, many scenes depicted the struggle of supporters of Enlightenment ideas with representatives of the world’s greatest religions³¹. People detached from national, cultural or religious traditions were to focus only on the scientific or technological progress, which was manifested in the film by the construction of a huge cannon used to launch manned capsules into space³².

The underground cities of the depicted society, like their inhabitants, were stripped of individual features. The only architectural detail that breaks the tectonics of raw, rounded concrete blocks are the elevator shafts in the form of glass cylinders. Interestingly, the science-fiction vision was in this case ahead of the actual solutions of this type by 20 years; the first hydraulic, glass elevator which was poetically named “star express” appeared in 1956 at the El Cortez Hotel in San Diego³³. The film also portrayed moving pedestrian walkways before they were actually invented³⁴.

However, another architectural solution that appeared in “Things to Come” could be regarded as a most shocking one; the futuristic city is completely windowless. Wells, fascinated by the first television broadcasts, suggests that tele-screens can successfully replace traditional windows. Therefore, the movie apartments do not have any openings, apart from entrances. This approach is a testimony of a purely scientific, rational approach to the human being. As Annie Pedret notes, this is how man was perceived at the first four CIAM congresses, which focused solely on the physical needs of human beings, such as hygiene, fresh air and light³⁵. However, are clean, well-ventilated and lit rooms really able to create optimal conditions for people? As it turns out, other factors are also extremely

²⁹ G. Adamczewski, P. Woyciechowski, *op. cit.*

³⁰ *Ibidem.*

³¹ H.G. Wells, *The Shape of Things to Come*, Gollancz, London 2019, for example: pp. 325–326, 376–378.

³² A similar solution appeared earlier in Verne’s novel “From the Earth to the Moon”, whose loose adaptation was the first science-fiction film in history – Méliès’ “A trip to the Moon”.

³³ G. Border, *Architecture of Science Fiction*, University of Edinburgh 2017, p. 35.

³⁴ *Ibidem.*

³⁵ A. Pedret, *CIAM: from ‘Spirit of the Age’ to the ‘Spiritual Needs’ of People* [in:] *Re-Humanizing Architecture: New Forms of Community, 1950–1970*, A. Moravánszky, J. Hopfengärtner (eds.), Birkhäuser Verlag, Basel 2017, pp. 43–62.

important. Scientific research proves that the view outside the window has a great influence on the psyche; it was even confirmed that patients who could see green areas during their convalescence recovered faster after surgery³⁶. The immeasurable need for an aesthetic experience, however, was not included in the ideally rational vision of the world in the film “Things to Come”.



Ill. 4. Modernist Shangri-La monastery in Frank Capra's “Lost Horizon”³⁷.

In this context, the avant-garde vision presented by the creators of another, science-fiction utopia which premiered just before Second World War – “Lost Horizon” seems much friendlier. The film, like “Things to Come”, tries to define the goals of architects of the modern movement. Instead of presenting the Shangri-la Monastery as stated in Hilton's novel – “a group of colorful pavilions clinging to the side of a mountain”, Frank Capra decided to use a far different solution³⁸. The space he visualized was characterized by straight, white walls and far, cantilevered roofs, reminiscent of Frank Lloyd Wright's buildings. The film set design also took the spatial arrangement from the American architect; the pavilions surround a central pond in a way reminiscent of the “Hotel Imperial” from 1915³⁹. The controversial set design concept sparked much debate, and was particularly strongly opposed by British critics who compared the monastery to a university library or a movie star's residence⁴⁰.

For Frank Capra, modernist architecture was important not only for aesthetic reasons. In an international style, the director saw the message of equality for all people; the aesthetics that crossed the borders of states became for him a metaphor for the peaceful coexistence of completely different nations. This is why he emphasized in his film the ethnic diversity that characterized the monastery. There were Taoist and Confucian temples in Shangri-la, and the

³⁶ J.M. McCoy, *Work Environments* [in:] *Handbook of Environmental Psychology*, R.B. Bechtel, A. Churchman (eds.), John Wiley and Sons, New York 2002, pp. 443–461.

³⁷ F. Capra, *The lost Horizon*, Columbia Pictures, USA 1937, set design: Stephen Goosson, <https://archive.org/details/lost-horizon-1937-ronald-colman-jane-wyatt-edward-everett-horton-thoma>, frame chosen from the movie (access: 20.08.2022).

³⁸ E. Rawitsch, *Frank Capra's Eastern Horizons: American Identity and the Cinema of International Relations*, I.B. Taurus, London–New York 2015, p. 99.

³⁹ D. Neumann, *op. cit.*, p. 124.

⁴⁰ E. Rawitsch, *op. cit.*, p. 99.

Lama was a Catholic priest who deeply believed in the ideal of mercy. Moreover, one of the speeches of the main character, Conway, was particularly important for Capra. In this scene the hero criticized the decision to evacuate only foreign dignitaries from the area threatened by military intervention and leave the local population for certain death⁴¹. The director was therefore extremely outraged when the producers of the film decided to censor this fragment after the US joined the Second World War⁴². After all, there could be no room for pacifist sentiments during military operations.

4. SUMMARY

Looking at the above-mentioned productions, one gets the impression that the architectural modernist avant-garde defined in science fiction films has two faces.

On the one hand, in productions such as “Aelita” or “Things that will come”, it is shown as a medium that is supposed to radically transform the current order. Changing the world to be perfectly rational and just must entail victims whose fate the revolutionists do not take into consideration. Moreover, they do not care about the destruction of the cultural heritage, which is completely worthless in their eyes. Such a modernist avant-garde rightly arouses objections and fear.

On the other hand, architectural modernism in films such as “Lost Horizon” becomes a carrier of humanistic ideas. The transnational style metaphorically represents the agreement between social classes or nationalities, and the goal of humanity is the peaceful coexistence of people of different views and religions. Thus understood, the modernist avant-garde becomes a desired and widely respected phenomenon.

It is easy to notice that the presented various characteristics are equally strongly present in the analyzed architectural trend; the technological, logical and rational dimension does not exclude a humanistic, symbolic message.

R e f e r e n c e s :

- [1] Adamczewski G., Woyciechowski P., *Prefabrykacja w XXI wieku*, “Inżynier Budownictwa” 2015, no 4, pp. 54–58.
- [2] Alpers B.L., *Dictators, Democracy, and American Public Culture: Envisioning the Totalitarian Enemy 1920s–1950s*, The University of North Carolina Press, Chapel Hill–London 2003.
- [3] Border G., *Architecture of Science Fiction*, Dissertation submitted for the degree of Master of Arts with Honours Architecture at the University of Edinburgh, Scotland 2017.
- [4] Capra F., *Lost Horizon*, Columbia Pictures, USA 1937, set design: Stephen Goosson, <https://archive.org/details/lost-horizon-1937-ronald-colman-jane-wyatt-edward-everett-horton-thoma> (access: 20.08.2022).
- [5] Colquhoun A., *Modern Architecture*, Oxford University Press, Oxford–New York 2002.
- [6] Feir G.D., *H.G. Wells at the End of His Tether: His Social and Political Adventures*, iUniverse inc., New York 2005.
- [7] Haines J., *Music in Films on the Middle Ages, Authenticity vs. Fantasy*, Routledge, New York 2014.

⁴¹ *Ibidem*, p. 104.

⁴² *Ibidem*.

- [8] Heynen H., *Avant Garde* [in:] *Encyclopedia of Twentieth Century Architecture, Volume 1, A-F*, S. Sennott (ed.), Fitzroy Dearborn, New York–London 2004, pp. 97–98.
- [9] Kaminska B.A., “Come, let us make a city and a tower”: Pieter Bruegel the Elder’s Tower of Babel and the Creation of a Harmonious Community in Antwerp, “Journal of Historians of Netherlandish Art” 2014, t. 6, no 2.
- [10] Konopacki-Maciuk Z., *Representations of the City in Science Fiction Cinema*, “Technical Transactions: Architecture” 2012, t.1-A/1/2012, pp. 413–425.
- [11] Lang F., *Metropolis*, UFA, Weimar Republic 1927, set design: Otto Hunte, Erich Kettelhut, Karl Vollbrecht, <https://archive.org/details/Metropolis1927EnglishVersion> (access: 20.08.2022).
- [12] Le Corbusier, *W stronę architektury*, Fundacja Centrum Architektury, Warszawa 2012.
- [13] Loos A., *Ornament i zbrodnia (1908)*, <http://teoriaarchitektury.blogspot.com/2010/10/adolf-loos-ornament-i-zbrodnia-1908.html> (access: 20.08.2022).
- [14] Marinetti F.T., *The Founding and Manifesto of Futurism* [in:] “Futurism: An Anthology”, L. Rainey, Ch. Poggi, L. Wittman (eds.), Yale University Press, New Haven–London 2009, pp. 49–53.
- [15] McCoy J.M., *Work Environments* [in:] *Handbook of Environmental Psychology*, R.B. Bechtel, A. Churchman, John Wiley and Sons, New York 2002, pp. 443–461.
- [16] Menzies W.C., *Things to come*, London Film Productions, Great Britain 1936, set design: Vincent Korda, https://archive.org/details/ClaCinOnl_ThingsToCome (access: 20.08.2022).
- [17] Mindrup M., *Introduction: Advancing the Reverie of Utopia* [in:] *The City Crown by Bruno Taut*, M. Mindrup, U. Altenmüller-Lewis (eds.), Routledge, London–New York 2015, pp. 16–31.
- [18] Neumann D., *Film architecture: Set designs from Metropolis to Blade Runner*, Prestel, New York 1996.
- [19] Orlński W., *Metropolis zmienia kino i świat*, “Gazeta Wyborcza”, 3.04.2008, <https://wyborcza.pl/7,75410,5086108.html> (access: 3.08.2022).
- [20] Pedret A., *CIAM: from ‘Spirit of the Age’ to the ‘Spiritual Needs’ of People* [in:] *Re-Humanizing Architecture: New Forms of Community, 1950–1970*, Á. Moravánszky, J. Hopfengärtner (eds.), Birkhäuser Verlag, Basel 2017, pp. 43–62.
- [21] Protazanow J., *Aelita*, Mezhrabpom-Rus, ZSRR 1924, set design: Nadieżda Łamanowa, <https://archive.org/details/AelitaQueenOfMarsoriginalVersion> (access: 20.08.2022).
- [22] Rawitsch E., *Frank Capra’s Eastern Horizons: American Identity and the Cinema of International Relations*, I.B. Taurus, London–New York 2015.
- [23] Śmiechowski K., *Warunki mieszkaniowe robotników na łamach „Gońca Łódzkiego” (1898–1906)*, “Studia z Historii Społeczno-Gospodarczej XIX i XX wieku” 2012, t. 10, pp. 105–120.
- [24] Wells H.G., *The Shape of Things to Come*, Gollancz, London 2019.

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