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(RE)SEARCHING FORMS OF THE FUTURE. FUTURISM AND CONTEMPORARY ARCHITECTURE

POSZUKIWANIE FORM PRZYSZŁOŚCI. FUTURYZM A ARCHITEKTURA WSPÓŁCZESNA

Abstract

The question of the future has always troubled men's minds. The origin is a metaphysical desire for the unknown. The progress of civilization is based on the rational actions of the researchers, scientists, engineers. On the other hand, the artists and the architects of great imagination and intuition look for new forms to shape the surrounding world. They use contemporary technology and science as the source of inspiration to make the future world a better place.

This paper researches examples of contemporary architecture that is often described as "avant-garde", "futuristic" or "neo-futuristic". It compares the latest architectural projects with the historical visions of future known from art, architecture and cinema.

Keywords: futurism, neo-futurism, post-futurism, posthumanism, contemporary, architecture

Streszczenie

Wizje przyszłości zawsze były tematem wyobrażeń człowieka, co jest spowodowane metafizycznym dążeniem do odkrywania tego, co niepoznane. Rozwój cywilizacji opiera się na tym, co racjonalne – odkrycia naukowe, techniczne, inżynierskie. Z drugiej strony artyści i architekci używają wyobraźni i intuicji w poszukiwaniu nowych form do kształtowania otaczającej ich przestrzeni. Korzystają ze współczesnej technologii i nauki jako źródła inspiracji, by zmienić przyszły świat na lepsze.

Artykuł prezentuje przykłady współczesnej architektury określanej jako „awangardowa”, „futurystyczna” bądź „neofuturystyczna”. Stylistyka wybranych realizacji porównana jest z wizjami przyszłości znanymi z historii sztuki, architektury i kina.

Słowa kluczowe: futurizm, neo-futurizm, post-futurizm, posthumanizm, architektura współczesna

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1. Futurism – speed, movement, dynamism

Imaginations of the future are a crucial element of human culture, they appear in literature, film, theater, and art. In architecture they have a special role. Looking into the future, architectural visions become a guiding sign, a pattern which architecture is set to follow. Architectural visions are based partly on intuition and partly on deduction – the analysis of the direction in which civilization is developing. Ideal techno-utopias sometimes turn into reality, the future becomes the present and the visions become our common built environment.

The ideas that glorified progress, development and innovation were first strongly articulated by the Italian Futurists. They propagated the name “futurism” which since then has meant following modernity and creating imaginations of the future. Futurism was born in the north of Italy at the beginning of the 20th century. It was a revolutionary movement, a reaction against historicism and the past. It preached the idea of a comprehensive revolution of civilization, culture and art. Futurists demanded the authenticity and expression of the dynamism of modern life – the movement, speed, heroism, risk, political and social progress. They aimed to express the beauty of the technical achievements of their epoch using art. The Futurist movement was heavily influenced by the second industrial revolution as well as by the scientific discoveries of the upcoming, so-called atomic age. Futurists acknowledged that the source of artistic inspiration should be the mechanical civilization of the early 20th century and art should present the motion and tumult of life in a modern city. Modernity was conceived as utopian, the development of technology, science and culture was meant to bring a better future. Avant-garde artists were looking for new formal pretexts, they used the technological inventions and scientific discoveries, for example the new concept linking time with space that appeared in physics at the beginning of the 20th century. Young Italian artists creating the futurism movement were inspired by the cubist’s technique. Cubists tried to represent the extension of the optical range, simultaneous perception, express new concepts of space. Futurists attempted to capture the movement itself. For example, they tried to represent objects in movement in painting. They presented objects that blend in with the surroundings, are scattered, become streaks, blurred by speed. They created compositions in which objects were reproduced multiple times as in the photographic studies of Marey and Muybridge. The impression of movement was intensified by expressive compositions of the interpenetrating planes and lines of complex geometry. They represented vehicles in motion or frames changing like in a kaleidoscope, imitating an image visible from trains, trams or cars moving through the city. It was the first attempt to represent the fourth dimension – time – in painting. In the sculptures and architecture, futurists also attempted to give a static piece of art a dynamic form which would create an impression of movement. In contemporary architecture there are examples of buildings which follow the aims and imaginations of a futurist artist.

PANEUM is an information centre with an exhibition space realized in 2017 for the company Backaldrin in Asten, Austria. It was designed by the office of Coop Himmelb(l)au. The building consists of a rounded form made of wood covered with stainless steel panels. It has the shape of a “cloud” floating above a rectangular pedestal covered with slabs of façade concrete. Along with the changing light different chiaroscuros appear on the rounded shapes,

creating the impression of movement, plasticity of the “floating” form. This is similar to the formal effect that the English artist Tony Cragg achieves in his sculptures.

In the design of the congress centre in Dalian in China Coop Himmelb(l)au applied a different formal idea. According to the architects, the task of the building was to create a recognizable monument in the central point on the main urban axis of the newly designed district of the city. The building took a wavy shape covered with a stainless steel sheets. It looks like its shape has been freely formed by the wind. The form follows the principles articulated by Thomas Marinetti: *Objects in motion multiply and distort themselves, just as do vibrations, which indeed they are, in passing through space*¹. The impression of movement is compounded by razor blades staring against the sun, which open the facade like the gills of a giant metallic shark. The folds create an impression of dynamism similar to the form of a famous figure *Unique Forms of Continuity in Space* sculpted by Umberto Boccioni. The figure seems to be right in the middle of running, it's sculpted like a blurry picture of someone moving.

Frank Gehry used similar procedure in a work of architecture. Boccioni's figure is cast in bronze while Frank Gehry sculpted two figures of dancers – Freda I Ginger – in glass, steel and concrete. The corner building in Prague took the shape of two dancing figures – Fred Astaire and Ginger Rogers. The cylindrical tower is crowned with a dome as Fred's head. Fred's straight figure is “hugging” his bending partner – in the form of a twin tower, in contrast clad with glass panels, reminiscent of the airy dress of the dancing Ginger.

Since the 90s, the works of Frank Gehry have been dominated by forms reproduced from his most famous project – the Guggenheim Museum. He uses the method of fragmentation, which features architects of the deconstruction movement. Gehry takes different volumes and shapes and put them together in unrecognizable fashions. His designs are distinguished by the plastic sculptural forms of bent pieces covered with titanium-zinc steel. One of the most spectacular buildings is the Walt Disney Concert Hall in Los Angeles. The silvery planes bend freely in different directions as if they were sails. Although they are static, their form creates the impression of movement similar to the sculpture “Sculptural Construction of Noise and Speed” by Giacomo Balla. *I believe the design of the Walt Disney Concert Hall suggests music, says Gehry, and I hope that when people attend concerts in the hall, their eyes will wander through the shapes of the building and find that that they see harmonies with the music they're listening to*².

The motif often presented by the futurists was a modern city, moving people, cars, trams and trains. Mechanical vehicles allowed 20th-century man to move at previously unattainable speeds. The car and motorcycle have become objects of the futurist cult. In 1908 poet Filippo Tommaso Marinetti wrote the manifesto of futurism. He admired the technological progress visible in modern cities, he wrote: *We affirm that the world's magnificence has been enriched by a new beauty: the beauty of speed. A racing car whose hood is adorned with great pipes,*

¹ F. T. Marinetti, *Second Technical Manifesto of Futurist Painting*, 1912, from: S. Giedion, *Space, Time and Architecture*, Harvard University Press, Cambridge, 2002, p. 444.

² J. Glancey, *The wonderful world of Disney*, Mon 27 Oct 2003, www.theguardian.com.



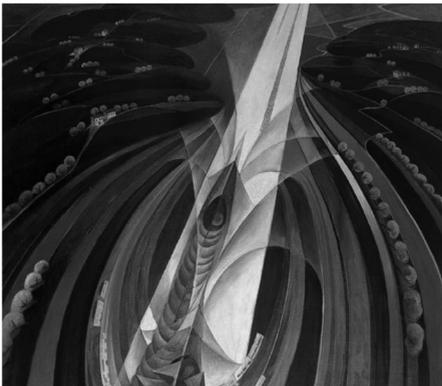
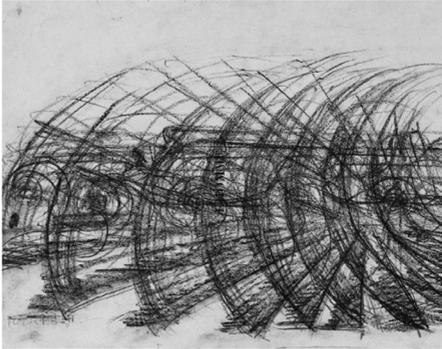
*like serpents of explosive breath – a roaring car that seems to run on grapeshot is more beautiful than The Victory of Samothrace*³. The idealistic, utopian futurist program saw the happiness of humanity in the urbanization and mechanization of the modern world.

At the beginning of the 21st century, well-known automotive concerns, one after the other, have invested in exhibition buildings to emphasize their uniqueness, commissioning projects to star architects. In 2006, the Mercedes Benz museum was opened. It was designed by the Dutch UN Studio which was founded by Ben van Berkel and Caroline Bos. The architects gave the building a dynamic form, thus referring to the futuristic tradition. Dynamism in the paintings of futurists was obtained, for example by sequential reproduction of the form. In the painting *The Speed of the Motorcycle* Giacomo Balla presented the vehicle in motion as a sequence of snails marked with arched brush movements, as if the traces of movement of the wheels was reflected in the frames of the exposed film. The floor plan of the museum was based on the form of a trefoil. It was delineated with three intersecting circles. The “trefoil leaves” floors, duplicated at individual levels, are available from two rolling spiral ramps connected with each other. As the architects admit, this principle was taken from the structure of a double helix of DNA. The visitor takes the lifts to start the journey through the exhibitions with ramps leading him down. The architects say: *The structure of the MB Museum is based on a trefoil; both in its internal organization and in its outward expression this geometry responds to the car-driven context of the museum. Inside, walking down the ramps of the museum, surrounded by cars of different ages and types, the visitor is reminded of driving down the highway*⁴. The sightseeing route resembles snails of motorways or parking ramps. The ramps wind around a huge atrium, just like in the Guggenheim Museum in New York. The atrium is the core of the building – its form, marked out by the cut of three circles, resembles the piston of the Wankel engine. The atrium is covered with a three-arm structure, referring to the Mercedes logo, in which windmills are placed. They cause a whirling effect that in the event of a fire sucks up the smoke creating a small tornado inside. Architects admit that the project tried to refer to iconic, futuristic buildings from the mid-twentieth century, besides the Guggenheim museum, there are forms similar to those known from the TWA terminal by Eero Saarinen – curved surfaces poured in architectural concrete. *For a building such as this concrete is the only material option: the demanding geometry cannot be implemented otherwise than with the use of cast-in-place concrete. The construction of smooth surfaces for the doubly curved elements is a challenge UNStudio has taken up many times before. In*

³ F. T. Marinetti, *Manifesto of Futurism*, first published in 1909, source: Robert Fox, *Back to futurism?* www.theguardian.com, Fri 20 Feb 2009.

⁴ Description from the website of Un Studio: www.unstudio.com.

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- III. 1. Umberto Boccioni, *Unique Forms of Continuity in Space* 1913
Coop Himmelb(l)au, Congress Center, Dalian, 2012
Tony Cragg, *Good Face*, 2007
Coop Himmelb(l)au, PANEUM, Asten, 2017
Giacomo Balla, *Sculptural Construction of Noise and Speed*, 1914
Frank Gehry, Walt Disney Concert Hall, Los Angeles, 2003



- III. 2. Giacomo Balla, *The speed of the motorcycle*, 1913
UN Studio, Mercedes Benz Museum, Stuttgart, 2006
Vittorio Corona, *Study for Dynamism*, 1926
Coop Himmelblau, BMW Welt Munich, 2007
Gerardo Dottori, *The Speed Triptych: The Race*, 1927
Norman Foster, Beijing Airport, 2008

*a series of projects from the early 1990s onwards, UNStudio has played with the inheritance of the heroic engineering-architecture of the mid twentieth century*⁵.

In the same period as the Mercedes museum building, the BMW Welt centre was founded in Munich. The winner of the competition for the project was the Coop Himmelb(l)au. Wolf D Prix, the owner of the office during his studies in Vienna, attended the lectures of Professor Karl Schwazer, who in the 1970s won the competition for the headquarters of BMW designing a tower consisting of four connected cylinders and a cylindrical museum building. The new BMW Welt building refers to these buildings with its cylindrical corner and materials. On the other side of the building there is another avant-garde icon of the twentieth century architecture, the roof structure of the stadium designed by Frei Otto for the Olympics in 1972. The BMW Welt centre building is a glass form covered with a “levitating” silver roof. In the corner of the building, the roof “collapses” creating a huge, twisting funnel. Diagonally laid facade panels heighten the dynamism of the form. The corner gives the impression of a glass-metal whirlwind that is about to pull the building forward. The dynamic shapes and the expressive corner resemble futurist art. The topic of Vittorio Corona’s work was often sportsmen taking part in races; cycling, motorbike, car. In the painting from 1926 – *Study for Dynamism* he tried to capture the figure of a motorcyclist in motion. A blurred figure of a man is leaning over motorbike, diagonal lines of the background emphasize the impression of speeding space. The shapes and colours of the image and the impression of movement resemble the shape of the BMW Welt Centre, confirming that the architects from the office of Coop Himmelb(l)au managed to achieve the intended goal – the effect of dynamism.

The plane, in addition to cars and motorcycles, had a special place in the list of inventions glorified by futurists. Airplane and airplane flight was one of the most frequently presented motifs of Futurism’s second wave. There is a special term for painting on this subject – *Aeropittura*. Paintings depict a view from the airplane cabin, for example a fighter swooping in a fighter attack or with dizzying perspectives and views of Italian landscapes.

The fascination with aviation has been given to many architects, starting with Le Corbusier and ending with Norman Foster. Foster, a passionate pilot, is a leading architect of the Hi-tech movement. The aesthetics of his work has always oscillated around dynamic forms, modern materials and the use of the latest technical solutions borrowed also from non-architectural areas, such as aerospace technologies. Norman Foster’s office designed Terminal 3 of the Beijing airport, which was created to serve passengers arriving for the Beijing Olympics in 2008. It has become the largest and technologically most advanced terminal in the world with an area exceeding one million square metres. The slender form of the roof resembles a giant wing floating for takeoff. The colour and texture of the form refer to the Chinese dragon symbol. From a bird’s eye perspective, the roof of the airport reveals itself as a dynamic, bright trail like a stretched flame or streak left by a passing plane. It looks just like in the landscape of Gerardo Dottori “The Race” from 1927 in which the frame of the landscape seen from the bird’s eye is cut by a dynamic smudge.

⁵ Description provided by architects, source: www.archdaily.com.



- III. 3. MAD Architects, Lucas Museum, Los Angeles
- Santiago Calatrava, City of Arts and Science, Valencia, 2005
- Star Wars, Senat Building
- Bernard Tschumi, Carnal Hall at Le Rosey, Rolle, Switzerland, 2014
- Santiago Calatrava, City of Arts and Science, Valencia, 2005
- Norman Foster, Apple Park, Cupertino, 2018

2. Retrofuturism – space age modernity

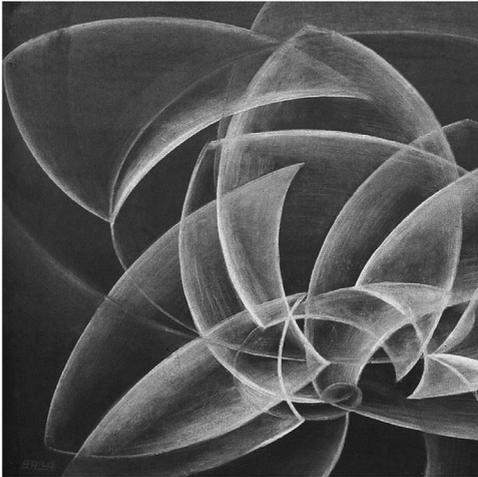
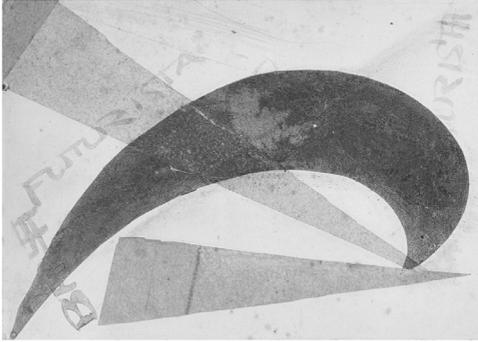
The first futurist's achievements found expression in the writings, the manifestos that set the theoretical direction of artistic activities. Futurists were loudly involved in propagating their ideas, it was the ideological sphere that gained fame throughout Europe. In their aggressive attitude, artists voiced shocking, dangerous views, they craved something new, different, unknown, combined with the desire to destroy. They glorified the war: "We will glorify war – the world's only hygiene – militarism, the destructive gesture of freedom-bringers, beautiful ideas worth dying for and scorn of woman"⁶. The notion of "modernity" and "development" is connected to the Enlightenment. Emmanuel Kant noticed that war forces people to accelerate development and creativity. The confirmation of this thesis was the technological leap made in the space age. It happened due to World War II and Cold War rivalry. The conquest of the space, especially in the United States and the Soviet Union, became the main theme of pop culture. In the 1950s and 1960s, when the space race between the superpowers, used for propaganda purposes, reached its peak, the style of the space age, known now as retrofuturism emerged. It was present in graphics, fashion, design, cars, and finally in architecture. Apart from Google architecture, there were ambitious projects, such as the LAX terminal tower in the shape of a UFO-like disc hung on two crossed, slender reinforced concrete arches or the New York TWA terminal by Eero Saarinen. Futurists praised cars, trams and planes, the new futurism glorified space ships and the conquest of outer space.

In 1977, George Lucas made the first part of the Star Wars saga based on the canvas of the USSR and US card war. Star Wars and 2001 Space Odyssey (from which Lucas drew inspiration) are two most important movies, whose action takes place in space, which left a huge mark on popular culture. The Star Wars "architecture" icon – the office building of the Senate has a real, existing copy. In 2010, Bernard Tschumi, won a competition for a cultural centre with a concert hall at the Le Rosey Institute in Rolle, Switzerland. The campus of the institute, known for educating children of elites from around the world, is composed of a group of classicistic buildings amid the green space of the park. Against them Tschumi set up a futuristic, shiny new building. *The dome acts as a hinge at the end of a sequence of old buildings*⁷. The dome is covered with a sheets of stainless steel and has a number of functions under it: a gym, a library and a cafe placed around a central concert hall. The futuristic external form is like an alien flying disc that has landed in the middle of greenery.

Star Wars creator George Lucas announced a plan to build museum of his name in Chicago. Ma Yansong and his office MAD has won the competition. Later, MAD designed alternative versions for other locations considered, San Francisco and Los Angeles. In all cases, the museum took on smooth, white abstract forms. The race for the location has been won by the city of Los Angeles. The form of the building follows the current trends but it is axial, symmetrical, and banal. The aesthetics fit in the climate of Star Wars – it is attractive, easy to understand suited to the potential mass tourist as well as the exhibition about "popular art" that will be presented inside. *I believe all kinds of art*

⁶ F. T. Marinetti, *Manifesto of Futurism*, first published in 1909, source: Robert Fox, *Back to futurism?*, Friday 20 Feb 2009, www.theguardian.com.

⁷ B. Tschumi [in:] Clay Risen, *Paul and Henri Carnal, Hall at Institut Le Rosey*, August 17, 2015, www.architectmagazine.com.



- III. 4. Giacomo Balla, *Lines of speed*, 1916
 Norman Foster, *Virgin Galactic Spaceport*, New Mexico 2014
 Giacomo Balla, *Vortex, Space, Form*, 1914
 Zaha Hadid Architects, *Mobile Art Chanel Contemporary Art Container*, 2008
 Mino Delle- Site, *Speed*, 1936
 Zaha Hadid Architects, *Capital Hill Residence*, 2018

*have a right to exist. I think it's important to have a museum, that I used to jokingly say supports all the orphan arts that nobody wants to see, but everybody loves. (...) I am an avid architectural fan and I wanted a special museum that was a work of art in itself, and Ma [Yansong] has done that three times*⁸. It's hard not to get the impression that this building is just a dummy of a spaceship from the next part of Star Wars which "landed" in a huge amusement park. The context of the project – the founder, the purpose and the surroundings justify the futuristic form.

Architecture takes inspiration from the "cosmic" aesthetics of sci-fi movies, and the cinema as well reaching for the latest architecture projects for the scenery of the films. That was the case of Disney production titled *Tomorrowland* in which the City of Arts and Science in Valencia appeared. The design by Santiago Calatrava was the perfect background for the futuristic story of the movie.

3. Neo-futurism of the information age

Hal Foster, in the paper "Neo-futurism: Architecture and Technology", wrote about a new way for architecture on the brink of information age which forces humans to adapt to social changes that come along with the use of new media. To highlight his ideas he uses the word neo-futurism. He describes: *I want to propose another approach – a neo-futurism. By neo-futurism I do not refer to a style or a school. I mean only to convey the need to respond to a new conjuncture of the technological (electronic redefinition of time and space, genetic transformations of life and death). (...) In short, the term 'neo-futurism' signals a need to periodize the modern rapport with the technological*⁹. Technological corporations take over the leading roles in the fields in which the states and military institutions once stood, not only the sphere of technology and research but also space exploration. They also invest in large architectural projects, prestigious and modern headquarters. The famous Apple commercial called "think different" includes 17 people who, according to the authors, changed the course of history in the twentieth century. Among the great leaders, philosophers, artists and scientists there are two visionary architects: Frank Lloyd Wright and Richard Buckminster Fuller. Both are known for their futuristic designs: in 1947 Frank Lloyd Wright proposed a project for a club in Los Angeles in the shape of discs hung over a cliff. Wright's other futuristic design – the Mile High Illinois has a realized modern copy – the Jeddah Tower in Saudi Arabia. Buckminster Fuller designed aerodynamic vehicles, houses of the future and a vision of a dome above New York. His student – Norman Foster, a leading representative of the high-tech style, was chosen by Steve Jobs to design the Apple Park in Cupertino, Florida (as well as Apple showroom projects). Steve Jobs had long attached great importance to design and architecture, he described the new headquarters: *It's a pretty amazing building. It's a little like a spaceship landed*¹⁰.

⁸ *Lucas Museum Breaks Ground in Los Angeles' Exposition Park*, 15.03.2018, www.i-mad.com.

⁹ H. Foster, *Neo-futurism: Architecture and Technology*, AA Files No. 14 Spring 1987, AA School of Architecture p. 26.

¹⁰ S. Syed, *The Spaceship Has Landed: Apple's New Campus Opens*, 19 May 2017, www.archdaily.com.

In 2014, Foster's studio won the competition for the the first private space port. Virgin Galactic Spaceport founder – Richard Branson – was also a hero in the “think different” commercial. The building was built in the desert of New Mexico. Architects have proposed a form resembling imaginations of sci-fi spacecraft. *The sinuous shape of the building in the landscape and its interior spaces seek to capture the drama and mystery of space flight itself, articulating the thrill of space travel for the first space tourists. Making a minimal impact on the environment, the scheme will be the first facility of its kind and a model for the future*¹¹. A sinusoidal, aerodynamic roof resembling a stingray covers a hangar, control centre and tourist accommodation. The curved shapes of the building flow sideways, seamlessly merging with the desert landscape. The entrance to the building leads through a long tunnel dissecting the building on its axis. Norman Foster in his design work embraces new technologies. He reveals his inspirations: *It is not only the hardware of space exploration which stimulates me but also the built spaces that it generates, such as the vertical Assembly Building at Cape Canaveral. Alongside this the space shuttle, atop its converted 747 jumbo jet transporter, is a reminder of the extraordinary beauty and performance of new materials that we have discovered through subcontractors to the space programme*¹². In comparison to the futuristic form of the spaceport, the spaceships that are supposed to fly into orbit look like relics of the past.

Architects fascinated by the vision of future, go a step further, creating projects for human settlements on the moon and Mars. In 2012, Foster + Partners joined the consortium set up by the European Space Agency to research the possibilities of using 3D printing to build a residential base on the moon – Lunad Habitation. The regolith that covers the surface of the moon is to be used as a building material. A base for four people was designed. The buildings consist of inflatable domes on which the 3D printer spray a mixture of rigolith in the form of foam that will create a shell protecting astronauts against temperature and radiation. A one and a half tonne test model was made in conditions imitating the lunar atmosphere. In 2015, the experience gained in the Lunar Habitation project was used in the Mars Habitation competition organized by NASA. A base composed of lunar-like modules covered with a mixture of Martian rigolith would be built using automated robots before the arrival of the first humans on the red planet.

The exploration of space is driven by human aspiration to constantly expand the knowledge. In a complex but poetic way this was illustrated by Stanley Kubrick in 2001: A Space Odyssey. The movie presents two opposing human aspirations during space exploration. First is the desire for the sublime manifested by the need for excitement, the experience of something completely different than us, something transcendent, that would liberate us from earthly limitations. Second is the desire for beauty and longing for meeting intelligence similar to us so instead of being lost, we would feel at home in the vastness of the space. Kubrick illustrated also the metaphor of Nietzsche's idea of “the jump”. First from a prehistoric man to present humans and the next jump to “superman” (Übermensch) – as a result of the conquest of space and the creation of artificial intelligence.

¹¹ *Design revealed for the world's first private spaceport*, 05 September 2007, www.fosterandpartners.com.

¹² N. Foster, D. Jenkins Foster, *On Foster... Foster on*, Prestel Pub, Munich, 2000, p. 487.

4. Post-futurism – transhuman techno-utopia.

The ideas of the development of civilization became the subject of further artistic exploration in the postmodern era. Neo-avant-garde groups: Ant Farm, Archigram, Gruppo 9999 or Haus-Rucker-Co continued the tradition of futurists in a spirit of joke and irony. In their installations from the borderline of art and architecture, they anticipated issues that have become important for contemporary art: posthumanism, transhumanism, bioart. After the industrial age and the space age, the time has come for the fascination for genetics, biotechnology, robotics, artificial intelligence and the quest to create a new man. Yuval Noah Harari writes: *bioengineers will take the old Sapiens body, and intentionally rewrite its genetic code, rewire its brain circuits, alter its biochemical balance, and even grow entirely new limbs. They will thereby create new godlings, who might be as different from us Sapiens as we are different from Homo erectus. (...) A bolder approach dispenses with organic parts altogether, and hopes to engineer completely non-organic beings. Neural networks will be replaced by intelligent software, which could surf both the virtual and non-virtual worlds, free from the limitations of organic chemistry. (...) Breaking out of the organic realm could also enable life to finally break out of planet earth*¹³. An amazingly realistic and moving vision of a humanized robot was presented by the brilliant designer Alexander McQueen during the spring / summer collection show in 1999. Dressed in a white dress the model, like a ballet dancer, entered the stage to begin a tense dance with two robots. She was standing on a rotating platform between the machines which by the camera's eyes "examined" the frightened girl before launching a violent attack with paint. This performance produced by Joseph Bennett is a work of art, the dress covered with a random composition of fluorescent paint is a relict of the show. The show was recorded by a centrally placed camera with a specific frame, reminiscent of the artificial "eye" through which the Hal 9000 supercomputer from 2001: A Space Odyssey controlled the crew. McQueen's performance resemble Kubrick's climate of tension and uncertainty caused by the post-humanistic conflict between man and machine.

The pavilion in the form of a spaceship designed by Zaha Hadid is a perfect place for a futuristic fashion show. Apart from architecture, Zaha Hadid designed fashion, and the catwalk for Chanel. In 2008, Zaha Hadid's office designed a mobile exhibition pavilion for Chanel. Zaha Hadid followed the latest trends, abandoned the old constructivist inspirations and rough concrete for folded shiny smooth shapes. The new aesthetics use modern materials: plastics, metal, glass. The white curves of the form create spaces known from sci-fiction movies. The pavilion is cut with a bent grid of oval panels, the form looks like dynamic lines known from futuristic abstractions, for example the Giacomo Balla painting "Vortex, Space, Form". The interior is a smooth continuation of the shell, the shape and space of the pavilion are united; it is reminiscent of the Philips Pavilion designed by Le Corbusier and Iannis Xenakis. The Chanel pavilion itself has become a work of art "exhibited" in major cities around the world. It is a work of architecture and sculpture, an icon which contains space but mainly presents itself.

¹³ Y. N. Harari, *Homo deus: A Brief History of Tomorrow*, Harper, 2015.

Another design from the office of Zaha Hadid Architects – a futuristic villa in the outskirts of Moscow – also resembles the dynamic compositions of Giacomo Balla. The house has two separate levels. Information provided by the architects says that the concept was to create a space that “grows” from the site, transfer its topography to the interior, generate a new “landscape” inside and create a continuous integration of external and internal spaces. The form of the building is significantly outstanding from the surrounding landscape. A high tower looks like a futuristic ship taking off from the slope. It is located 22 metres above the ground and there is a master bedroom with a terrace open to the views above the surrounding forest.

Although we don't know what the upgraded version of humankind will look like, designers still try to push the limits of architecture and make it look more and more futuristic. The adjectives “avant-garde” and “futuristic” are used colloquially to determine the latest bold architectural realizations. The desire to express the form of the future was a significant element of the first and second avant-garde. Many artists and architects in the twentieth century followed this myth. The achievements of modern science, neurobiology, genetics, and the visual world provide new content that act on the imagination of creators and architects. Nowadays the quest for an innovative, “future” form again directs architects to take inspiration from sci-fi, contemporary technology development – visions of the colonization of the space, ideas of transhumanism and posthumanism. The requirement to make another iconic building becomes visible in the form of contemporary neo-futuristic architecture – shiny, dynamic and expressive forms, “flying” roofs and discs. In the age of the world wide web (soon space wide web) a student can graduate from university lying in his bed, a businessman can join a conference from the heart of the jungle and a doctor can make a diagnosis alone in the middle of the ocean. When there are servers and virtual reality there is no point in building new museums, libraries, offices, stores etc. Still, people do build them and architects provide bold new, fancy and flashy concepts. It seems the post-futuristic architecture, just like *Haute couture*, is made just to show off, to create another *Fun Palace*.

References

- [1] Foster H., *Neo-futurism: Architecture and Technology*, AA Files No. 14 Spring 1987, AA School of Architecture p. 26.
- [2] Foster N., Jenkins D., *Foster, On Foster... Foster on*, Prestel Pub., Munich, 2000.
- [3] Fox R., *Back to futurism?* www.theguardian.com, Fri 20 Feb 2009.
- [4] Giedion S., *Space, Time and Architecture*, Harvard University Press, Cambridge, 2002.
- [5] Glancey J., *The wonderful world of Disney*, Mon 27 Oct 2003, www.theguardian.com.
- [6] Harari Y. N., *Homo deus: A Brief History of Tomorrow*, Harper, 2015.
- [7] Risen C., *Paul and Henri Carnal, Hall at Institut Le Rosey*, August 17, 2015, www.architectmagazine.com.
- [8] Syed S., *The Spaceship Has Landed: Apple's New Campus Opens*, 19 May 2017, www.archdaily.com.