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SCULPTOR OR ENGINEER? THE IDEA OF THE "TOTAL WORK OF ART" AS A FORM OF FREEDOM OF MIND IN THE FACE OF DANGER. COMPARATIVE ANALYSIS OF SELECTED EXAMPLES

Abstract: In times of global unrest and unfolding contemporary dramas, art can act as a guardian of those areas of freedom that allow us to function in spite of everything. Today's art faces a much more difficult task than satisfying the aesthetic sensations of its audience. Since World War I, which forever changed the way we think about the world and our sense of security, art has been subject to constant revolutions and transformations, as the fate of humanity has changed rapidly. Therefore, as a consequence of this evolution, a new definition of art emerged, the peculiarity of which turned out to be an inner strong experience. Art whose task is no longer expression, but impression in the sense of "a strong impact on the viewer" has become a characteristic sign of our time. This definition is realized in the art of contemporary artists, involving the viewer in the non-verbal thought process, allowing them to actively complete what is missing from the message. The article discusses the idea of the "total work of art" based on selected examples from the work of multimedia artists using the sensuality of space, perception and an active attitude of the viewer. These are artists who do not allow the freedom of self-determination in themselves to be suppressed and take the viewer out of their comfort zone with the help of strong sensory stimuli triggering their imagination and making them realize the sense of freedom.

Keywords: total work, audiovisual, multisensory space, perception synthesis of arts, freedom, imagination

1. Introduction

In times of global anxiety and unfolding contemporary dramas, art can act as a guardian of those areas of freedom that allow us to function in spite of everything. Today's art faces a much more difficult task than satisfying the aesthetic sensations of its audience. Since the First World War, which changed forever our thinking about the world and our sense of security, art has been subjected to constant revolutions, as the fate of humankind has changed rapidly. Therefore, as a consequence of this evolution, gradually transforming its form into action, a new definition of art emerged, featuring shock, an inner powerful experience, as its peculiar feature. A characteristic sign of our times, it has become art whose task is no longer expression, but impression in the sense of a "strong impact on the viewer". This had already been foreseen by Bergson, who in 1889 wrote that art implements itself into the human psyche rather than expresses it. The idea here was to evoke an experience on a scale from emotion to shock. This definition does not only correspond to the art of avant-garde artists, but is also relevant today, involving the viewer in a non-verbal thought process that actively complements what is missing from its message. The aim of the paper is to discuss the idea of the "total work of art" based on selected examples from works of multimedia artists, experimentalists using the sensuality of space, perception and an active attitude of the viewer.

The paper focuses on analysing the structure of the selected works, recognising in them the characteristics of contemporary societies dominated by new technologies and assessing the efficiency of the works of art against the accepted pattern, i.e., one based on the concept of the synthesis of arts. It also examines how new technologies unleash the imagination of both the creator and the viewer. It is imagination that, when properly used, can become a safety valve for each of us. The awareness of otherness or otherness of consciousness causes negative emotions and social relations of dissatisfaction with a group or phenomenon to be transferred to oneself in order to discharge emotions. The need for a safety valve becomes stronger as the rigidity of a social structure increases and becomes a sensitive eye looking at the world, giving art a therapeutic dimension. The artist's freedom stems from creative opposition to everything that shapes human life. It is freedom that gives one the right to formulate opinions on any subject. The artist, carried on the wave of freedom, observes the world with a critical attitude. Their status of freedom gives them the right to question things that seem obvious to others. Artists do not allow their freedom of self-determination to be suppressed. Civilisation uses this critical stance for worldview changes. Thanks to artists and new technologies, the world is modernising. It is becoming more and more liberated from outdated

values and stereotypes. It is thanks to different consciousness, an independent perception that we are becoming more sensitive to paradigm ossifications.

In this article, the comparative analysis method has been applied, which is the author's attempt to diagnose and identify, in the indicated examples, the common components of works of art which are strong multisensory stimuli, affecting the viewer in a synchronous multisensorial way, ultimately leading them out of their comfort zone towards a sense of freedom. The results of the analysis, in cognitive terms, have allowed the author to identify the causes of phenomena taking place in the dynamically developing information society and to determine the likelihood of behavioural factors occurring in the future for certain groups of people operating in specific situations, places and cultural systems. It is clear from the considerations made that the audiovisual shaping of contemporary culture has become a ubiquitous and relevant experience for audiences in the context of broader social communication. In an attempt to fit in with contemporary trends, art is realising itself in the form of a veritable technological revolution. It can be said that we are dealing with a new kind of art that opens up the possibility of total spatial experience, which at the same time can be a source of therapy within the framework of the increasingly popular Mindfulness method, dynamically developing since the 1970s. This method fits perfectly into the prevailing socio-economic conditions as an effective way of enhancing well-being in general. It permeates all walks of life. It is also becoming an increasingly visible trend in contemporary art.

2. Research objectives and methods

The scientific objective of the research task is to discuss the idea of the "total work of art" (German: *Gesamtkunstwerk*) based on the work of selected 21st century artists. In the context of the dynamically developing academic field of art history, which is constantly changing its face, often anticipating current eras in its search for new means of expression, it is interesting to know how contemporary artists today make use of the heritage of art and whether their experiments can be completely detached from the past. Therefore, the starting point for the research carried out was the idea of the "total work of art". Known since antiquity, it has gradually developed, gaining strength during the Romantic period and finally making its contemporary breakthrough. In theory, the total work of art was to be characterised by a synthesis of many arts, leading to an enhancement of the creator's final vision.

This research paper primarily focuses on analysing the works of selected artists: Olafur Eliasson, Anthony McCall, Eyal Gever and Ryoji Ikeda. They represent an era of change resulting from the development of computerisation and modern technology, dominated by science, robotisation and digitisation.

Their visual actions are based on a synthesis of the arts understood as a unity. Despite their diversity, they represent the search for a universal language. Each of these artists has sought to create a work of art that is a powerful stimulus affecting the viewer synchronously through all the senses, ultimately leading to an experience of catharsis. What all the artists have in common is the use of intense stimuli, aiming to lead the viewer from an attitude of an observer to that of a participant in the creative act. This is due to the perception of art as an 'immersive environment', where the highest degree of viewer involvement is assumed, and the viewer is ultimately supposed to identify themselves with the artwork. It is a vision of an experience with existential significance.

The applied method of comparative analysis, necessary to define the scientific problem, is a starting point for further studies. Due to the broad scope and multithreaded nature of the research subject, in this study the topic has been narrowed down to an attempt to diagnose and analyse selected problems concerning the influence of contemporary science on the development of visual arts. The paper focuses primarily on experiments in the field of sculpture and art installation, referring to the perception of a multi-media artwork. Attention is paid to the growing interest in science among artists, opening up ever new possibilities for abstracting the world, and developing creative and cognitive processes, which has become a source of creative inspiration. The scientific approach of artists to their work and their adoption of analytical attitudes require constant acquisition and expansion of knowledge in the field of innovative technologies, materials and engineering sciences, resulting in blurring the boundary between art and technology.

New technological possibilities have liberated the contemporary artist from the ideal of classical beauty and faithful reproduction of reality, and set their imagination free. The artist today can push the boundaries of truth; they do not need to enthrall or move. Their art does not like to be sublime. Artists themselves can abide by their own rules. This freedom has been brought to them by progress, both in the form of modern means of expression and change in the way they think about art, the world, humankind and their relationship to culture. The artist who constructs a strange work, an alienated creation, directs our attention towards analysis, throws us out of our comfortable balance of mind and body. He or she allows us to confront the perceived world on our own, wakes us from a lazy slumber and activates our perception. In this way, a forgotten fragment of reality can become a living inspirer of transformation. If art is used as a tool for a critical outlook on a cultural community, or a social identity, it provides a kind of a protective shield against us sinking into the worldview of the previous generations and contributes to a cultural evolution.

3. Research description. The limits of sense perception, nature and science. The path to freedom. A study of selected cases.

Olafur Eliasson: *The Weather Project*

Olafur Eliasson is a Danish-Icelandic artist born in Copenhagen in 1967. In his creative work, he is primarily concerned with issues of perception, problematic representation of reality and mechanisms of its reception. He analyses ways in which the world is perceived and modelled, aiming to create a new theory of vision. He is interested in the way we perceive distance, the position and size of objects, as well as the variety of contexts in which art is experienced through all the senses, which, in addition to their physical basis, also have cultural significance that varies from one society to another¹. The close relationship between the viewer and their environment also remains within the scope of his research. Eliasson analyses individual as well as social aspects of life. He refers to science and nature, balancing between reality and illusion, using complex geometric forms, mirrors and kaleidoscopes. He utilizes natural resources such as light, water and air temperature, thus creating unusual sculptures and unique installations in the public space.

One of his most recognisable works is *The Weather Project*, a pseudo-solarium consisting of a solar sphere suspended in the Turbine Hall of London's *Tate Modern Gallery*, illuminating the room. The Weather Project was realised in the 1980s, at the beginning of the global debate on climate change. Part of the reason why the exhibition became successful was that it took place at the time of developing knowledge and growing awareness of the condition of the atmosphere. Research suggests that, in recent decades, the theme of the atmosphere has moved beyond the physiological and meteorological realm to become a new concept of aesthetics. As Zhuofei Wang argues in his study, the atmosphere, understood as a primordial sensory reality, is neither a purely subjective state nor an objective thing. It is an omnipresent phenomenon that forms the basis of our experience of life. That is why it is not what we perceive, but how we perceive it, that is so important².

The Weather Project is an example of an artistic realisation resulting from the author's reflections on the role of the universality of weather phenomena and human participation in shaping the environment. By combining advanced technology and natural elements, the installation serves as a metaphor, creating a specific atmospheric space. The artist's aim is to develop the viewer's

¹ D. Angutek, *Kanadyjska antropologia zmysłów-alternatywa wobec postmodernizmu*, "Lud" 2010,no.94, p. 227.

² Z. Wang, *Atmospheric Design and Experience with an Exemplary Study of Olafur Eliasson's, "The Weather Project"*, "Contemporary Aesthetics" 2018, vol. 16, no. 1, pp. 142-147. Retrieved from:<https://philpapers.org/rec/WANADA-2>[accessed: 02.12.2023].

immersive perception of the environment. The project addresses three important issues of the immersive environment: the spatial environment of electronic reality, popularly known as virtual reality, the cultural space and the aesthetic experience. The artist has achieved a remarkable metamorphosis of the museum, a transformation of the place providing an immediate and multi-sensory experience, allowing immersion in a space of illusion. This is a groundbreaking achievement also because of the designated function of the conventional museum institution, which mediates and even manipulates the perception of art. This spectacular action has become a staging strategy that allows the audience to re-examine their perception and the environment that shapes it³.

From a technical point of view, creating the illusion of the Sun was not particularly difficult. 200 low-sodium single-frequency lamps, most commonly used in street lighting, were placed at the end of the hall. Their frequency of light emission is so low that all colours other than black and yellow are invisible. These lamps therefore change the view and landscape of the surroundings into one of two shades. 4,000 m² of perfectly made mirror panels were installed on the ceiling, in which the audience could recognise themselves by looking up. The structure, consisting of 20 mirrored panels, was assembled in advance and then raised and attached to the ceiling. The undertaking required complete cleansing of the exhibition space. This was a necessary action, enabling the viewers to freely observe their mirror reflections. This artistic phenomenon can be seen as the *Alice in Wonderland Syndrome*⁴ – not, however, in the context of psychosensory disorders, but as a transfer of the illusion of body perception into art to illustrate two major challenges of the contemporary world: interculturality and intermediality⁵.

Although using modern tools, Eliasson's contemporary theatre cannot free itself from the tradition of aesthetic thought, an important element of which is Hans Gadamer's hermeneutics. It is deeply rooted in the idea of art understood as a form of "play"⁶ which is a transformative experience for the experimenter. Play, like the act of creation, is the effect of movement which highlights changes taking place. Movement lies at the heart of all change. Thus, a work of art is created out of movement, becomes a fixed movement in time and space, and

³ Ibid.

⁴ B. Steinbord, *Zespół Alicji w Krainie Czarów - czy tylko aura migrenowa u dzieci? / Alice in Wonderland Syndrome - or just migraneous aura in children?* "Child Neurology" 2015, vol. 24, no. 49, pp. 9-11.

⁵ I. Grodz, *Intermedialność Alicji w Krainie Czarów. Przykład adaptacji TimaBurtona*, "Czytanie Literatry. Łódzkie Studia Literaturoznawcze" 2021, no.10, pp. 205-214.

⁶ P. Dybel, *Gadamera myśl o sztuce*, Wydawnictwo Akademia Sztuk Pięknych w Gdańsku, Gdańska 2014, pp. 27-41.

is also perceived by the viewer in movement⁷. Gadamer writes in *Das Spiel der Kunst*: <<“The play of art is like a mirror appearing before us again and again over the millennia, in which we see ourselves – often surprised by this, often also appearing to be strangers to ourselves – as we are, as we could be. Is it not a false pretence if art and serious matters are separated from each other in such a way that the play of art is allowed only in special places, on the borderline of what is taken seriously in life?”>>⁸. Art is a continuum of self-understanding. It is more than just a collection of beautiful things. It takes the viewer out of the comfort zone, out of grey reality, frees their imagination and allows them to be someone else. An encounter with it offers us the possibility of self-recognition, of multiple transformations, of being one and at the same time a multiplicity of other self-images. Gadamer writes in *Truth and Method*: <<“The proper being of a work of art consists rather in its becoming an experience that transforms the experienter.”>>⁹ In this way, a new space is born, empty and ready to become, to form. It is at the same time a space that can transform into a collective and a personal space, a sacred and a profane space, a close space in which it is possible to settle and a distant alien space symbolising a journey or a path leading to knowledge of new places and the self. In the imaginations of the audience, space can appear as open or closed, as created space or remembered images of a place and self. This is what happened at The Weather Project. A space was created in which groups of different people were able to form. (Fig.1.)

The main element of the artist's works is light. Eliasson, who comes from Scandinavia, where sunlight is limited most of the year, has a special relationship with light. He is interested in how it affects our perception of the world, as it changes depending on different locations, weather conditions, times of day and year – hence the artist's experiments with daylight in different parts of the world and conditions, using different standards, various properties and different angles of incidence. Light that cannot actually be seen is interesting to the artist as an element that can be made visible through a work of art that will make it expressive. The artist notes that illuminating space with yellow light of one frequency changes our point of view. When you enter a space

⁷ K. Kołodziejczyk, *Projekt Space Fillers. Sztuka instalacji w przestrzeni publicznej jako konfrontacja współczesnych działań wizualnych z architekturą historyczną. The Space Fillers Project. Art installation in public space as a confrontation of the contemporary visual actions with the historic architecture*, [in:] E. Węclawowicz-Gyurkovich, ed., *Historia i współczesność w architekturze i urbanistyce*, vol. 2, monograph no. 467, Wydawnictwo Politechniki Krakowskiej, Kraków 2014, pp. 105-129.

⁸ D.-H. Gadamer, *Das Spiel der Kunst*, [in:] *Gesammelte Werke*, vol. VIII: Ästhetik und Poetik I, Mohr, Tübingen 1993, pp. 86-93.

⁹ D.-H. Gadamer, *Prawda i metoda. Zarys hermeneutyki filozoficznej*, transl. B. Baran, Wydawnictwo Naukowe PWN, Kraków 1993, pp. 159-160.

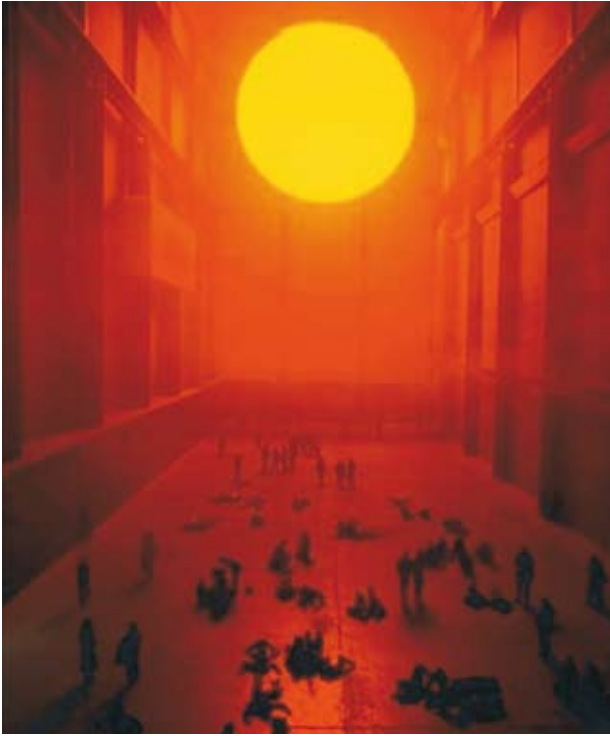


Fig. 1. *The Weather Project*. Tate Modern Gallery. London 2003.
Author: Olafur Eliasson. Photo by Andrew Dunkley & Marcus Leith. Source: <https://olafureliasson.net/artwork/the-weather-project-2003/> [accessed: 02.12.2023].

saturated with light, the way you experience your surroundings changes. Flooding a room with light of one colour makes everything appear grey and our eyes gradually become accustomed to the light. Only with time do we notice more and more details. And when we switch the light to white, the world gains a whole spectrum of colours. Then we can start to perceive our surroundings in a completely new way. The artist is fascinated not only by the influence of light on our way of seeing the world, but also by its motivating function, pushing us to action. This shows how Eliasson perceives the creative process, expanding its construction possibilities.

Eyal Gever: *#Laugh*

Eyal Gever is an Israeli sculptor born in Tell Aviv, who was the first artist in history to hold his opening in space. For an artist, the primary function of



Fig. 2. *#Laughter*. A global collaborative art project. The International Space Station 2016. Author: Eyal Gever. Source: <https://www.eyalgever.com/laugh> [accessed: 2.12.2023].

a work of art is to convey meaning, an idea or a message through visualization. In today's world, art is an evolutionary and global concept, open to new interpretations. Eyal Gever uses the achievements of new technologies. Looking at the works of this artist, the question arises whether we can still call them art. Moreover, should this concept be used in the context of sculptures created using 3D printers? By analysing Gever's experimental work, the author tries to answer the above questions. Gever first creates computer simulations of phenomena or objects, and then prints the finished project in the form of a three-dimensional sculpture. In 2016, the artist started cooperation with the National Aeronautics and Space Administration NASA, part of which was the *#Laugh* project (Fig. 2), which is an attempt to print the first sculpture in space. The artist himself, in his book *The interrelationship and convergence of technology and art*, refers to the concept of "technology", emphasizing its Greek origin from the words *tekhnē* and *logia*, which mean "craft" and "research", respectively. We can therefore say that in the case of art, technology becomes the study of the craft that shapes resources for practical purposes. It allows the artist to cross borders, which is why, in general terms, it is often perceived as a tool used to control the world. However, by narrowing its scope to art itself, it also means the transcendence of the materials used to create it. In the case of modern technologies, this involves, for example, the transformation of

information. Contemporary artists increasingly use new materials and techniques. Technology has always been a fundamental force in the development and advancement of art, providing artists with new tools. In the digital age, art continues to change thanks to technology, more than ever before. Access to new technologies provides artists with the opportunity to constantly develop. They learn to use these technologies to express their ideas¹⁰. New technologies encourage artists to be more experimental and innovative, even if this becomes a challenge in public art. Taking up this challenge, artists strive to ensure that their art survives. This is not an easy task, due to the specificity of open spaces which require different strategies for the protection of materials and works of art than the conventional space of cultural institutions. To sum up, it can be safely said that in recent decades, from the first half of the 19th century until today, with the birth of modern science, art has completely changed. Although the concept of art has undergone constant changes over the centuries, today we cannot ask about the nature or essence of art, because it is realized as a phenomenon that exceeds the rigid boundaries of definition. As Władysław Tatarkiewicz writes in *The History of Six Concepts*: <<"the ancient concept of art was clear and distinct, but it no longer meets today's needs. The modern concept is closer to these needs, but it is not clear and distinct. The first one is only historical, while the second one, seemingly current, requires correction">>¹¹. Contemporary art is therefore an open and hybrid concept. The difficulty in understanding the above phenomena is caused by the fact that we, as recipients, are embedded in cultural tradition, which is why it is difficult for us to understand something that is based on completely new creative categories. The ongoing transgression of art means that the previously known concept of art gains a fluid formula, and the appearance and ways of perceiving art are recycled and renovated.

Gever's works are an example of an ongoing revolution in art. The Israeli programmer and digital artist creates sculptures based on moments that fill the viewer with awe, terror, wonder or silence. He is fascinated by extreme disasters, uncontrollable powers and unpredictability – forces that remind us of the constant fragility of human life. Using its own 3D animation computer software, Gever has developed computational models for physical simulation and geometric modelling. His works are artistic reconstructions of devastating scenarios – from oil spills to volcanic eruptions. The artist explores the areas of contact between destruction and beauty by capturing catastrophic situations as cathartic experiences. In his work, Gever combines his two greatest

¹⁰ E. Gever, *The interrelationship and convergence of technology and art*, "IEEE Potentials" 2015, vol. 34, no. 6, pp. 8-12.

¹¹ W. Tatarkiewicz, *Dzieje Sześciu Pojęć*, Wydawnictwo Naukowe PWN, Kraków [1982] 2011, p. 36.

passions: art and programming. He acquired programming skills while serving in the Central Computing System unit of the Israeli Defence Forces in the early 1990s. Here he specialized in advanced programming applications. His main tasks included creating electronic simulations to calculate the effects of explosions, collisions and other destructive events. After completing his mandatory military service in 1992, he spent two years at the Bezaleel Academy of Art and Design in Jerusalem. During his studies, he founded his own digital art company. He quickly became a figure of the emerging Internet generation, working with the most influential people in the IT industry. In the 1990s, Gever's career went from strength to strength. And then came the 9/11 attacks. Gever and his wife were living in New York at the time. What struck him most about these tragic events was the intriguing interface between the mundane and the completely unexpected. Gever was amazed by the horror and epic beauty he witnessed that day. For the artist, this shocking event also became a painting, an illustration of the deadly clouds of dust rushing through the centre of Manhattan. From that moment, Gever, together with an international group of programmers, mathematicians and physicists, began to create mathematical models of disasters and natural disasters, from which he then printed selected fragments in a three-dimensional form. Gever is not interested in recreating a real disaster. He also does not want to build monuments to commemorate these events. Rather, he relates his unique observations of disasters to his own view on life, which was shaped in a family burdened by the experience of the Holocaust. Gever's metaphorical art is an expression of the symbolic combination of tragedy and beauty, something many artists before him had tried to do. In particular, *Vanitas* painters in the early Renaissance recreated symbolic content intended to remind viewers of transience. Their still lifes include human skulls or rotten fruit juxtaposed with luxury items or other objects of fleeting beauty and pleasure. In a sense, Gever's play does the same, although in a less moralistic form. By freezing a devastating yet aesthetically beautiful moment, it reminds us of the fragility of human life¹².

Anthony McCall: 5 minutes of Pure Sculpture

Equally interesting experiments in the field of sculpture are carried out by Anthony McCall. New materials and a scientific approach equate the position of a contemporary artist with that of an engineer, designer and researcher. This is proven by the concept of "living sculpture" implemented by the British artist,

¹² E. Sabella Weesjes, *Eyal Gever. Exploring the Intersection Destruction and Beauty*, "Natural Hazards Observe" 2015, vol. XXXIX, no. 6, pp. 8-11. Retrieved from: <https://hazards.colorado.edu/uploads/issue/53375b6bc0e8bc3358319433ec8a357d3f715760.pdf> [accessed: 20.11.2023].

Anthony McCall, born in London. The concept of "living sculpture" appeared much earlier. We can find it in the ancient Greek myth of Pygmalion, in the context of a statue of the beloved king of Cyprus brought to life by Aphrodite. This metaphysical experience is associated with the concept of dynamism, developed in Stoic philosophy on the basis of the concept of active and passive matter borrowed from Aristotle. *Pneuma* (from Greek "breath", meaning the active element on which the quality of the body depended) consisted of matter that enlivened the form. A similar thing happens in Anthony McCall's project entitled *5 minutes of Pure Sculpture*, which is an example of a total spatial experience (Fig. 3.). The project consists of several three-dimensional light images, arranged in the shape of cones, marking shimmering lines on the ground and changing their shape under the influence of movement. The sculptures react to moving observers and are "animated" by them.



Fig. 3. *5 minutes of Pure Sculpture*. National galerie im Hamburger Bahnhof. Museum für Gegenwart. Berlin 2012. Author: Anthony McCall. Photograph by Sean Gallup/Getty Images. Source: <https://www.anthonymccall.com/solid-light-works> [accessed: 2.12.2023]

Anthony McCall uses constant light in his animations. He began a series of geometric illuminations that brought him fame in 1973 with the work entitled *Line Describing a Cone*. It was the first movable volumetric form constructed by the artist using projected light, which allowed him to achieve a phenomenal effect of transforming space, gradually evolving into three-dimensional space. This installation is a development of a unique art concept based on a film of constant light. McCall developed a characteristic technique for his works consisting of animated lines drawn in white on a black background, displayed in rooms saturated with delicate mist (originally smoke and dust). Thanks to this procedure, two-dimensional drawings are articulated as seemingly tangible sculptural forms in real space¹³.

Inspired by the film avant-garde around the *London Film-Makers' Co-op*¹⁴, he created the illusion of space, blurring the boundaries between cinema, sculpture and drawing. His ephemeral works give the impression of tangible physical objects. Projected horizontally in space onto a wall or from the ceiling to the floor, they absorb the viewer in single, slowly moving cones of light. New technologies such as computer animation and digital projection allowed him to reformulate his ideas and expand his formal language. He created a new series of works including *Doubling Back* (2003), which is the first new film in which two curved lines slowly flow into each other, resembling a slightly breaking wave. The double projection *Leaving* (2009) is his only work so far that uses ambient sounds accompanying the transformations of two shapes on the wall. The horizontal works still resemble a cinema session using a projector beam thrown along the screen. Since 2005, vertical projections have been created, emitting light from the ceiling, allowing the viewer to be involved in the spectacle. As they are circled by visitors, they more fully enter the sphere of a full-scale, albeit metaphorical, sculpture. Here, McCall uses organic wavy lines¹⁵. Many of his works are metaphors for the human body, such as *Between You and I* (2006) and *Meeting You Halfway* (2009). Despite its conceptual and formal rigor, McCall always creates an open space for the public, where viewers can move freely, interact with the works, communicate with each other, or simply wander in the mirages and metamorphoses of the artist's imagination.

Ryoji Ikeda: A hypnotic audio-visual explosion

Ryoji Ikeda is a Japanese audiovisual artist, cosmic polymath, sound scientist and matrix shaman – a true enigma. His audiovisual installations bring

¹³ A. -P. Michaud, *Line Light. The Geometric Cinema of Anthony McCall*, "October" 2011, no. 137, pp. 3-22.

¹⁴ Ibid.

¹⁵ N. M. Elcott, *Anthony McCall and the Mediation of Immediacy*, Walther König, Berlin 2012, pp. 1-53.

fleeting moments of sensual transcendence and majestic delight. The artist's creative process is based on the use of computer programs in real time to convert text, sound and photographs into "data" which is then reproduced on an electronic matrix in a binary form. It resembles a barcode pulsating convulsively and blinding us with hypnotic flashes of a stroboscope. The visualizations are accompanied by a soundtrack corresponding to musical mathematics. Using elements such as the number of hertz in a musical interval or the integer numbers of sound waves, an extraordinary soundscape is created, enhancing the visual effects. The technical composing process is based on complex audiovisual production algorithms. It is this raw and experiential stimulation that makes Ikeda's work universally appealing¹⁶.

His work titled *A hypnotic audio-visual explosion* from 2018-2020 (Fig. 4) is a hypnotic spectacle, a strong sensory experience in an expanding sound-spatial continuum. Ikeda creates the illusion of a metaphysical world – unknown, immeasurable and infinite. It is a symbolic journey to the limits of human perception.



Fig.4. *Audiovisual installation*. Author: Ryoji Ikeda. Musee d'art et d'histoire Fribourg. 2020. Photograph by Francesco Ragusa. Source: https://www.ryojiikeda.com/project/x_verse/#data_verse_3 [accessed: 2.12.2023].

¹⁶ P. Zawojski, *Sonowizualne strategie Ryoji Ikedy. Ciało jako wielofunkcyjny instrument polisensoryczny*, [in:] J. Mikołajczyk, M. Popczyk, eds., *Ciało-Muzyka-Performans*, Wydawnictwo Uniwersytetu Śląskiego, Katowice 2017, pp. 160-180.

Ikeda's work is characterized by a research approach. The artist interprets scientific methods of categorizing data, giving them audiovisual, changing rhythms, often consisting of extremes and opposites that combine with almost mathematical precision. His works are created in cooperation with various specialists in physics and mathematics. Some of them are based on data from the archives of NASA, *The Human Genome Project* and CERN.¹⁷

4. Final conclusions and summary

The research results have allowed the author to draw conclusions regarding the influence of audiovisual media on shaping contemporary culture. Audiovisual experience is becoming more and more important for recipients in the context of social communication. We observe a growing scale of this phenomenon with a dominant disproportion in relation to verbal experience. Contemporary recipients of visual arts are focused primarily on comprehensive communication in the form of integrated audio and visual information. The mechanism of audiovisual perception is ubiquitous; it definitely exceeds the boundaries of art and becomes the basic mechanism of the information society. This affects both our perception of the world, spatial orientation and human behaviour. Contemporary art is realized in the form of a real technological revolution, which is happening before our eyes when it becomes possible to bring an installation to life or print a sculpture in space. At the same time, the components of these works of art, science and culture refer to the tradition of these goods. In visual times, artistic values are shaped through new media. The analysis of selected works by intermedia artists has allowed the author to outline the profile of a contemporary artist who meets the imagination of today's recipients perceiving art as a multi-functional, multi-sensory instrument. Today's artist discusses their perception of the world and puts emphasis on creativity. The way they use work tools is completely arbitrary. This means that you can create a mental work of art that does not require a physical form but determines the ability to distance oneself from one's own thoughts, both at the level of the creator and the recipient. This perception of the artist's role puts the right to personal freedom, an active approach to cognitive processes and the creation of messages in an individualized language in the foreground. For a modern artist, art is a tool of self-discovery, which makes them free even in the face of the greatest threats to the world.

¹⁷ P. Zawojski, *Technokultura i jej manifestacje artystyczne: medialny świat hybryd i hybrydyzacji*, Wydawnictwo Uniwersytetu Śląskiego, Katowice 2016, pp. 216-154.

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RZEŹBIARZ CZY INŻYNIER? IDEA „TOTALNEGO DZIEŁA SZTUKI” JAKO FORMA WOLNOŚCI UMYSŁU W OBLICZU ZAGROŻENIA. ANALIZA PORÓWNAWCZA WYBRANYCH PRZYKŁADÓW

(streszczenie)

W czasach globalnego niepokoju i rozgrywających się współczesnych dramatów, sztuka może pełnić rolę strażnika tych obszarów wolności, które pozwalają nam funkcjonować mimo wszystko. Dzisiejsza sztuka stoi przed o wiele trudniejszym zadaniem niż zaspokajanie doznań estetycznych jej odbiorców. Od czasów I wojny światowej, która na zawsze zmieniła nasze myślenie o świecie i poczuciu bezpieczeństwa, sztuka podlegała nieustannym rewolucjom, przemianom tak gwałtownym jak gwałtownie zmieniały się losy ludzkości. Dlatego w konsekwencji tej ewolucji powstała nowa definicja sztuki, której swoistą okazało się wewnętrzne silne przeżycie. Charakterystycznym znakiem naszych czasów, stała się sztuka której zadaniem nie jest już ekspresja, tylko impresja w znaczeniu „silnego uderzenia w odbiorcę”. Ta definicja realizuje się w sztuce współczesnych artystów, angażując w niewerbalny proces myślowy odbiorcę, który aktywnie uzupełnia to czego w jej przekazie brakuje. W artykule została omówiona idea „totalnego dzieła sztuki” w oparciu o wybrane przykłady z twórczości artystów multimedialnych wykorzystujących sensualność przestrzeni, percepcję i aktywną postawę odbiorcy. Są to artyści, nie pozwalający stłumić w sobie wolności do samostanowienia, którzy za pomocą silnych bodźców sensorycznych wyprowadzają odbiorcę ze strefy komfortu, co wyzwala ich wyobraźnię i urzeczywistnia poczucie wolności.

Słowa kluczowe: dzieło totalne, audiowizualność, przestrzeń multisensoryczna, percepcja synteza sztuk, wolność, wyobraźnia

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3. Shaping spatial identity: the dichotomy between contemporary architecture and the arts (2018)