

**UNIVERSITY OF PÉCS DOCTORAL SCHOOL
OF ARTS**

Zsolt Ecsedi

Light as a creative tool

*Contemporary artworks in public spaces and nature use light as the material of the
work*

DLA Dissertation Theses

Thesis supervisors

Prof. Tamás Gaál DLA, sculptor

Prof. Péter Somody, painter

2024

Introduction

The Sun, which provides living beings on Earth with the warmth and light they need to survive, is also held in high regard by most religions. Our attachment to the Sun is very visible in our art. Even from the Neolithic period, we have architectural and material monuments closely linked to this celestial body and its light.

The mystery and illusion of light is not the subject of my thesis, given the cultural and historical richness of these aspects.

In prehistoric times, the light of the Sun was the only means of vision, but later, with the acquisition of the ability to light fires, man became able to navigate in the dark. Today, our light sources are most often powered by electricity, and we have created countless different light-emitting devices.

Until there was no other way for artists to present light as a work of art, they evoked the illusion of it through different pattern structures in sculpture or painting gestures. The works of fine art included here are unique in their kind in that they use plastic means to represent the phenomenon of light, which is thus present in the form of a tactile material. An example is Giovanni Lorenzo Bernini's *Ecstasy of Saint Teresa*, where the artist has created a phenomenon of divine light in gilded bronze above Saint Teresa and the angel. In the landscape elements of the paintings of Bernini's contemporary Claude Lorraine, the celestial body and its light are also important. The sun is usually a central motif, one might say the main subject in his paintings. I could mention William Turner, Vincent Van Gogh and many other artists whose paintings reveal important and significant observations about light, and whose use of unique techniques of light representation were highly formative and revolutionary in their time.

The intention to represent artificial light has been present in art from the advent of the lightbulb through the spread of photography to the present day. We can think of various experimental artistic movements and artists of the 20th century, such as Man Ray's rayograms, or László Moholy-Nagy's long exposure light paintings and other experiments with light. Along with the development of light technology, a closely related field of art, light art, has emerged, using light as a raw material. Kinetic art also makes extensive use of light as a creative element in its moving sculptures. This art movement was also the first to create public works in which different sources of light were artificially inserted in such a way that they became an integral part of the works on display.

The aim of the research:

My research does not aim to explore all the artists who have worked with light. My aim is to present a selection of artists and works, selected according to individual criteria, who have approached light in this discipline in a unique and innovative way that outlines the theme I have chosen to explore. The artists listed are not necessarily selected from the best-known artists in the artistic canon, but are examples relevant to my thesis.

A very important question for me is: what is and what is not a work of light art?

The subject of the research:

Light artworks are most often displayed in the dark enclosed spaces of museums, galleries or light festivals. My research is directed towards light works that, outside of these enclosed spaces, are situated in and interact closely with nature and public spaces.

What I find important to analyse is how contemporary artists use the environment of their work, how they relate to it and with the use of light.

Works that are composed in landscapes and operate with light inevitably relate to nature, therefore I will first briefly address the approach of land art. How does light art in nature compare with the approach of artists who have been working in this genre since the 1960s?

The spectrum of materials used in public art today has broadened, from bronze and stone sculptures to glass, steel and many others, and now there are also works that are using light as their primary material.

The other main element of my thesis is the presentation and analysis of works of light art in public spaces, selected according to individual criteria. I am referring here to works in public spaces that are displayed and complemented by the use of light. I am not referring here to artworks that use light to highlight the work, but to those that incorporate light as a whole or as an element of the work, and are temporarily or permanently displayed in public spaces.

It is worth exploring the possible realisation, content, presentation and documentation of these works within the genre. Within the realisation, I am thinking of the technical details: the tools used, the principle of operation of the works. I also consider it important to examine the impact of the works on their environment, both in nature and in the urban settings. What is the relationship of light art works with people? How do they fit into the environment? What is their purpose in the place? What impact do they have on nature?

There are very few works that are on display permanently. A significant proportion of light art works are installations. In many cases, the light works are predestined to be ephemeral; due to technology, they can only operate intermittently, sometimes only for a day at a time. Documentation plays an important role in the case of these works, making the real-space spectacle permanent and re-presentable.

There is also a sensitivity to this site- and time-specificity of light art. These installations in nature, stepping out of the usual representative sites of artworks, explore space and nature, and the work is born in connection with it. In some works, documentation takes over the role of the work, most often when only photographs, videos and a description by the artist are left to explore, present or possibly repeat the work.

In the creation of a light installation, the viewer is presented with light that cannot be touched. The artist shapes its position, its properties. It is transformed into a visual element, then perpetuated in some analogue or digital form, and most often ceases to exist in real space. I also consider it important to illustrate the development of the commonly used light-emitting devices used in light art, which can be seen with the naked eye, and their physical and other properties, through the works of a few selected artists.

The state of some public works using light is also worth looking at. Some of these works are overdue for repair, restoration and possible reconstruction in Hungary. A very good example of this is the examination of Miklós Schöffler's Chronos VIII. I considered it important to ask for the opinion of a conservator on how such a work can be repaired and restored according to an expert: what are the requirements, what is the tolerance limit, how much can a previously installed work change in terms of its structure, technical parameters or visual appearance?

Research methodology:

The elaboration and analysis of the content of the dissertation, its different layers, matured and reduced throughout the doctoral training. Methodologically, I had to set up my own set of criteria according to which I would analyse and compare each of the authors. I have also tried to include in the thesis the artists who are closest to the present day and the techniques they use. In my doctoral thesis, I have tried to apply my pragmatic approach, not only to the vision of the works, but also to the technical background of their functioning.

The result of the research:

"Most visual works of the future are the work of the 'light painter'. He will have the scientific knowledge of the physicist and the technological skills of the engineer, combined with his own imagination, creative instinct and emotional power."

László Moholy-Nagy

The time for László Moholy-Nagy's vision may not yet have arrived, or may never will, given that most visual art is created by a 'light painter'. Still, he was right in that working with light in the present has a history, and is constantly evolving with technique. There are more and more artists on the art scene who are using light as a material and/or subject in their work. Since the 1960s, the role of works using light as a creative medium in art has been growing.

Although the term 'light art', or even its classification as art, is controversial, various groups, associations and an increasing number of museums have been set up to show these works.

The perception of light is a fundamental and inseparable part of our vision. It follows that, in a way, light itself is part of every work of art, in the sense that without it we would not be able to perceive any image or object with our eyes. Many artists, including even prehistoric man, have been concerned with the representation of light in some way, whether in painting, sculpture or drawing. Since the Gothic stained glass windows, the technological advances of the 20th century have given rise to a highly innovative art form, perhaps the most reflective of our times, the art of light, which explores different aspects of this intangible material.

The theologian Jeffrey L. Kosky has interpreted the symbolism of the Sun and man-made, artificial light as being distinct. In the case of natural light, we can speak of a transcendent, divine significance or "cause". That which gives meaning to light, and everything that it reveals appears and happens for a reason. God is central to this statement. Artificial light loses its transcendent content, it is empty, it obscures the Sun, it upsets the natural order. Nevertheless, Kosky also recognises that artificial light is already part of our lives as "moderns", as he calls it, and he understands the desire for speed and technological progress as a kind of devotion to God. The ability to 'make light' has become, so to speak, an essential part of our existence.

Technically, in terms of the representation of light, artists experiment - in addition to using natural light in various ways - with a variety of electric, LED, laser and other light sources, sometimes using digital devices to create their work in nature.

Those light artists - most of the artists I have selected and presented - who work outside the gallery space are usually concerned with working with nature, sometimes using the landscape as a canvas, sometimes as an intentional part of their work, their composition. Those artists who take space into account in the composition of their work - using nature in a way that can even be seen as part of their work - add an extra meaning, a content to the view. These works are made even more meaningful by the consideration of their surroundings; we can think about for example, James Tapscott's Arc Zero Nimbus, a gateway-like light installation on a bridge.

The different approaches of the artists can be clearly observed in their works, using light to highlight and transform the natural landscape and natural phenomena, giving them meaning, complementing them, making the viewer pay attention and become absorbed, highlighting the power and specificity of nature. They use light as a means of communication, as a material for their art.

In some works, a paraphrase of earlier artistic schemes can be detected, whereby natural and artificial elements appear side by side, suggesting a symbolic and synthetic relationship, the natural landscape accommodating the artificial light installation, appearing complementary to each other.

Unlike most land art works, these works do not transform nature in their materiality, they do not physically intervene in the form of the landscape. They continue the spirit of land art, but abandon its damaging, intrusive attitude towards nature. In most cases, nature art, its attention to nature, is much closer to this artistic style, even if the artists do not use natural materials. Their work usually does not physically intervene in nature in any way.

The question arises, however, whether light works that appear in nature can be charged with the environmental impact of light pollution. Further research on this question would be worthwhile.

The light works presented in my research, which appear in public spaces, usually have a social charge in their subject matter, communicating with and closely related to people and the man-made environment. Some works are memorials, calling attention to remembering, and are usually monumental in scale because of their technical characteristics.

Works in public spaces are more critical in tone. They deal with themes that relate to the history of humanity, but some also draw attention to the harmful effects on the environment. I have tried to present pairs and pairs of opposites in my thesis. For example, the Cathedral of Light, erected by the National Socialist German Workers' Party before the Second World War, is formally and technically related to the memorial to the American disaster 11th of September

2001, but is diametrically opposed in content and impact. Yet there is something that can be mentioned as a negative in both cases, namely their unnecessary monumentality.

This monumentality has its price in the case of *Tribute in Light*. The unfortunate coincidence of the illumination of the light installations on the two towers at the beginning of September to commemorate the victims has claimed further victims. At the time, migratory birds passing by were caught in the light and many died as a result. This was brought to the attention of conservationists. Since then, efforts have been made to remedy this problem with the cooperation of environmentalists.

In contrast, I mentioned the French HEHE group's *Nauge Vert* in Finland. This work could be called "clever art", it does not use unnecessary formal elements, it does not use much energy or material, yet its simple symbolism has been a great success in Finland. The work was created with a kind of educational purpose, to raise awareness about reducing our energy needs, about unnecessary overconsumption, that every person can do something to slow down emissions by changing their consumption habits.

The content of Csáji Attila's work "*ÁtHÍDalás*" (Transition) is as significant as that of the HEHE group. Through his work, he made a symbolic link to the Hungarians who were torn apart by the destruction of the *Mária Valéria* bridge connecting Esztergom and Párkány, and in doing so he was able to make a step towards the rebuilding of this bridge. Although his installation did not function flawlessly during the presentation, the spiritual charge was not lost for that reason.

There are few public works in our country that deal with light as the material of the work. In the symbolic example I have presented, I have shown the joint relationship between the work of two artists. Lajos Dargay's *Tower of Light*, erected in Eger, and then demolished as a result of its sad fate, its creative elements and lights are revived in the work *Chronos VIII* by his master Nicolas Schöffer. The two lives are symbolically intertwined here. But an interview also reveals that Schöffer's light tower, now in the public square, is once again under threat.

Bibliography

Specialized literature, catalogs

Adcock, Craig, *James Turrell – The Art of Light and Space*, University of California Press, 1990.

Albu, Christina, *Mirror Affect: Seeing Self, Observing Others in Contemporary Art*, Univ Of Minnesota Press, 2016.

Aknai Tamás, *Nicolas Schöffer*, Corvina Kiadó, Budapest, 1975.

Aknai Tamás, „Kinetikusok Egerben”, *Művészet*, 1979/8.

Aknai Tamás, *Egyetemes művészettörténet 1945–1980*, Dialóg Campus Kiadó, Pécs–Budapest, 2001.

BEKE László, *Moholy-Nagy László munkássága*, Corvina Kiadó, Budapest, 1980.

Bérces György – Erostyák János – Litz József, *A fizika alapjai*, Nemzeti Tankönyvkiadó, Budapest, 2003.

Castells, Manuel, *Az információ kora. Gazdaság, társadalom, kultúra 1. köt. A hálózati társadalom kialakulása*, Budapest, Gondolat – Infonia, 2005.

Csáji Attila, *Billenő idő*, Püski Kiadó Kft. Budapest, 2009.

Csáji Attila, *Fényút / Light Path*, Műcsarnok, 2015.

Dr. Csillag László – Dr. Kroó Norbert, *A lézerek titkai. Az én világom*, Kozmosz könyvek, Budapest, 1987.

Czeglédy Nina – Kopeczky Róna, *A fényjátékosok. Kepes Görgy és Frank J. Malina. A tudomány és a művészet metszéspontján*, Ludwig Múzeum, 2010.

Descola, Philippe – Lenclud, Gérard – Severi, Carlo – Taylor, Anne-Christine, *A kulturális antropológia eszméi*, Századvég Kiadó, Budapest, 1994.

Eröss István, *Természetművészet*, Líceum Kiadó, Eger, 2011.

Ferrier, Jean-Louis, *Négyszemközt Victor Vasarelyvel*, Corvin Kiadó, Budapest, 1981.

Fitz Péter, *Kortárs magyar művészeti lexikon. Schöffer Miklós*, 3. kötet, Budapest, Enciklopédia Kiadó, 2001.

Giménez, Carmen – Trotman, Nat, *James Turrell*, Solomon R. Guggenheim Foundation, cop., 2013.

Beke László – Hangyel Orsolya – Kaszás Gábor – N. Mészáros Júlia – Dr. Németh Lajos – Sík Csaba – Wehner Tibor, *Dargay Lajos szobrászművész*, Budapest, Képzőművészeti Kiadó, 2006.

Kaszás Gábor, „Teremtett és generált világok”, in Beke László – Hangyel Orsolya – Kaszás Gábor – N. Mészáros Júlia – Dr. Németh Lajos – Sík Csaba – Wehner Tibor, *Dargay Lajos szobrászművész*, Budapest, Képzőművészeti Kiadó, 2006.

Kepes Alapítvány, *Fény Éve, Fényművészet – Kronológia*, AKK Alapítvány, Eger, 2016.

Kepes György, *A világ új képe a művészetben és a tudományban*, 1956.

Kim, Govan, *A retrospective James Turrell*, Prestel, München, 2013.

Kosky, Jeffrey L., *Arts of wonder: Enchanting Secularity – Walter de Maria, Diller + Scofidio, James Turrell, Andy Goldsworthy*, The University of Chicago Press, 2013.

Krasznahorkai Kata, „A tér képe. Úton Walter de Maria *Lightning Fieldjéhez*”, *Balkon*, 2009. 11–12.

Lenygel László, *Kepes György Művészete – The art of Gyorgy Kepes*, Eger Megyei Jogú Város Polgármesteri Hivatala, Eger, 1992.

Losonczi Alpár, *Merleau-Ponty filozófiája – Ad Hominem 7.*, Máriabesnyő–Gödöllő, 2010.

Lovász Ádám, *Az érzet deterritorializációja. A kiterjesztett észlelés filozófiája*, Budapest, 2018.

Merleau-Ponty, Maurice, *A látható és láthatatlan – Rezonőr*, Budapest, 2020.

Moholy-Nagy László, *A festéktől a fényig*, Kriterion Könyvkiadó, Bukarest, 1979.

Peternák Miklós, *Új képfajtákról – Intermedia könyvek*, Budapest, 1993.

Sauter, Daniel, *Light Attack, Media Art nad the Moving-Moving Image as Intervention in public Spaces*, VDM Verlag, 2009.

Sebők Zoltán, *Az új művészet fogalomtára*, Orpheusz Kiadó, 1996.

Seregi Tamás, *Művészet és esztétika*, Tiszatáj könyvek, Szeged, 2017.

Speer, Albert, *Erinnerung*, Ullstein GmbH, 1976.

Szegő György – Rockenbauer Zoltán, *Nicolas Schöffer, 1912–1992*, Műcsarnok Nonprofit Kft., 2015.

Welsch, Wolfgang, *Eszttikai gondolkodás*, L'Harmattan Kiadó, Budapest, 2011.

Online databases:

<https://www.independent.co.uk/news/obituaries/walter-de-maria-artist-who-forsook-a-career-with-the-velvet-underground-to-create-electric-enigmatic-8764340.html>

downloaded: 2021.04.01.

<http://kielderartandarchitecture.com/art-architecture/cat-cairn-the-kielder-skyspace.html> downloaded:
2021.04.23.

<https://studio-jt.net/>

downloaded: 2021.04.07.

<https://stuartwilliamsart.com/luminous-earth-grid>

downloaded: 2021.05.14.

<https://javierriera.com/texts/about-land-art/?lang=en>

downloaded: 2021.05.10.

<https://www.thisiscolossal.com/2019/01/light-installations-by-javier-riera/>

downloaded: 2021.05.23.

<https://www.stirworld.com/see-features-james-tapscott-s-immersive-art-is-about-the-presence-of-omnipresent-natural-elements>

downloaded: 2021.04.20.

<https://elephant.art/iotd/tanapol-kaewpring-fire-in-a-box-2010/>

downloaded: 2021.05.17.

<https://mediaklikk.hu/m5/cikk/fenyevek/>

downloaded: 2020.08.10.

<https://www.heol.hu/heves/kultura-heves/nem-vilagit-mar-az-egri-fenytorony-405328/>

downloaded: 2021.02.10.

https://www.hegyvidek.hu/aktualis/hirek/masodik-vilaghaboru-xii?fbclid=IwAR2mWohZ1C0Dy9CVkjN3TLAyUVxMidWdQU6Fn8RyiH15tJ_3gwFPkKV6BNs

downloaded: 2021.04.11.

<https://www.nytimes.com/2020/08/13/arts/design/september-11-memorial-light-canceled-coronavirus.html>

downloaded: 2020.05.08.

<https://abcnews.go.com/US/yorks-911-tribute-light-endangers-160000-birds-annually/story?id=65508601>

downloaded: 2020.05.10.

<https://www.independent.co.uk/news/obituaries/walter-de-maria-artist-who-forsook-a-career-with-the-velvet-underground-to-create-electric-enigmatic-8764340.html> downloaded: 2021.04.01.

<http://kielderartandarchitecture.com/art-architecture/cat-cairn-the-kielder-skyspace.html> downloaded:
2021.04.23.

<https://studio-jt.net/>
downloaded: 2021.04.07

<https://stuartwilliamsart.com/luminous-earth-grid>
downloaded: 2021.05.14.

<https://javierriera.com/texts/about-land-art/?lang=en>
downloaded: 2021.05.10.

<https://www.thiscolossal.com/2019/01/light-installations-by-javier-riera/>
downloaded: 2021.05.23.

<https://www.stirworld.com/see-features-james-tapscott-s-immersive-art-is-about-the-presence-of-omnipresent-natural-elements>
downloaded: 2021.04.20.

<https://elephant.art/iotd/tanapol-kaewpring-fire-in-a-box-2010/>
downloaded: 2021.05.17.

<https://www.youtube.com/watch?v=5o6TcXSG2-w>
downloaded: 2022.08.12.