



**inAW Journal**  
Multidisciplinary Academic Magazine

**KAROL SZAFRAN**

# **FOUNDATIONS OF VISUAL CULTURE**

The multitude and evolution  
of images

# ABSTRACT

Today, in the course of constant technological, cultural and philosophical changes, the status of the image, which in digital art is transformed into a different kind of image – the “cybercultural image”, is constantly evolving. And both in direct contact, in the reality overloaded with visual attractions, and in a deeper humanistic discourse. In social discussions presenting further research observations on imaging we can see the questioning of the existence of the image itself in its traditional sense. Art, which uses new technologies as tools, now gives us many suggestive examples of processes that build the world of cyberculture. The ever-changing technological world puts us now and then in a new reality. The dynamics of these changes and experiences, which we often do not notice, also change the way we create and look at works of art.

## **Keywords**

Artifact; Photo camera; Video; Photography; Graphics; Interactive; Internet; Video camera; Visual culture; Medium; Net art; Image; Digital image; Cybercultural image; Digital revolution; Electronic revolution; Interactive revolution; Image revolution; Industrial revolution; Network revolution; Technical revolution; Network; Simulacrum; Art; Technology; Video art; Virtual reality; World Wide Web; Interactivity

Work shared under [Creative Commons Attribution 4.0 International Public License](#).

Publisher: Jan Matejko Academy of Fine Arts in Krakow, Interior Architecture Department

Editor: **prof. dr hab. Beata Gibała-Kapecka**, mgr Marika Wato

Graphic design: Marika Wato

Translation PL-EN: MSc Maciej Jęczmiński

Title page photograph: [Adrien Olichon](#) / [Pexels](#)

The 'inAW Journal' periodical was established owing to the subsidy under the project titled:  
"Designing the Future – the Program for Development of Jan Matejko Academy of Fine Arts in  
Krakow in years 2018-2022"

**mgr Karol Szafran**

Jan Matejko Academy of Fine Arts in Krakow

# Foundations of visual culture

## The multitude and evolution of images

Introduction	2
The technical revolution	3
The electronic revolution	4
The digital revolution	6
The interactive revolution	7
The network revolution	8
What next?	11

### Introduction

The constant process of shaping the modern condition of images (probably still temporary) is gradually transforming. It started about 200 years ago. And so we too must go back in history to better understand it. During this time, we have been and continue to be witnesses to, or participants of, the next revolution in imagery. Some of them occur dynamically, even overnight. Others are maturing, waiting for their right moment, not only for purely technical reasons. An analysis of these changes leads us to distinguishing between five particularly important events that happened over that time. They are related to the concept of the industrial revolution, its dynamic changes in subsequent historical editions, which relate to technology and production. In view of this term and its development, fundamental changes in the formation of the modern paradigm of imaging can be classified. Each of the following processes has contributed in its time to a profound transformation known today as the concept of “visual culture”.



## The technical revolution

The invention of a prototype photographic camera by Louis Daguerre and Nicéphore Niépce is worth taking as a starting point. Thanks to the invention itself, a new medium for the materialization of images is also created (which will later materialize another one: film). These events ushered in the first revolution that directly touches the realm of image. It will, of course, have an impact on the field of visual arts, but much later, because the mechanization of the recording of image in the

**View from the window in Le Gras (1826). The first successful durable photograph taken by Nicéphore Niépce in 1826**



Source: [https://pl.wikipedia.org/wiki/Historia\\_fotografii#/media/Plik:View\\_from\\_the\\_Window\\_at\\_Le\\_Gras\\_Joseph\\_Nic%C3%A9phore\\_Ni%C3%A9pce\\_uncompressed\\_UMN\\_source.png](https://pl.wikipedia.org/wiki/Historia_fotografii#/media/Plik:View_from_the_Window_at_Le_Gras_Joseph_Nic%C3%A9phore_Ni%C3%A9pce_uncompressed_UMN_source.png)

photographic camera or film camera was considered rather the function of scientific instruments or entertainment tools. They were not treated as a medium of visual arts. Unlike graphics, where mechanical techniques support the process of turning an artistic vision into an artifact, in the case of photography they combine the creation of a vision and the creation of a material image into a single process. The artist operates the machine, while the machine begins to oversee the process of creating images. However, it took a long time for this to happen. It was not so much the technical revolution that had to contribute to the change of gaze, but the change in the transformation of the art world within the formulation of ideas, concepts or notions. The mechanization, or automation, of the image production process was the main reason for the reluctant approach to photography and film as an art medium. Photography introduces technical automatic procedures into the scope of cultural experiences of creating images. Thanks to the technological revolution, machine and mechanical imaging methods are introduced into the world of art.

## The electronic revolution

The next revolution in technology and in ways of imaging does not abandon what has been developed so far – on the contrary. Its achievements will make use of technical media and get clarified on their basis. It will be about 100 years before the second of the revolutions reaches its climax. Although already in 1884 Paul Nipkow patented the first electromechanical television system, it was not until 1927 that Philo Farnsworth invented an electronic image scanning system.<sup>1</sup> (Also persons involved in the television broadcast should be mentioned, such as: A.A. Campbell-Swinton – the prototype of an electronic camera, John Baird – the inventor of the first working television system, and Wladimir Zworykin – the developer of the TV tube.) Of course, the TV picture is then constantly transformed and refined but it retains its basic principles and logic of operation. Ultimately, television, like film and photography, aspires to being an art medium more because of the field of video art.<sup>2</sup> Television transmits images and sounds in real time and builds relationships between the places associated one with another by the transmission.

---

<sup>1</sup> Sep. 7, 1927 – the first successful TV broadcast

<sup>2</sup> In 1963, Nam June Paik and, a little later, Wolf Vostell presented exhibitions in which they both pioneered the use of TV sets. This event was considered the beginning of the history of video art. It is worth noting, however, that the work of *Variations Luminodynamiques 1* by Nicolas Schöffer dates back to 1961 and it is this work which begins the history of the art of video.

**Nam June Paik, Exposition of Music – Electronic Television, 1963,  
Parnass Gallery, Germany**



Source: [http://www.mediaartnet.org/works/exposition-of-music/  
images/4/](http://www.mediaartnet.org/works/exposition-of-music/images/4/)

Materiality combines only photographic or film images, the characteristic feature is durability and invariability over time (accidental changes are treated as faults or damage). Electronic images, on the other hand, tend to have the status of events. They happen live. They do not create anything permanent but they pass away as they are presented.<sup>3</sup> It can therefore be concluded that the second revolution in imaging strips material existence off images. Instead of functioning as real artifacts, images become events.

## The digital revolution

The first digital image from Russell Kirsch's scan is considered the breakthrough moment in the third revolution in the field of imaging. He performed a scan of the head of his three-month-old. The image composed of only white and black pixels (without grayscale) has become a symbol and, at the same time, the beginning of digital imaging. A moment complicated in its process, closely related to the development of computer technologies.

Digital images, like electronic ones, are characterized by non-existence, eventuality and disappearance from the realm of material artifacts. However, regardless of the visualization technology used, the core of digital imaging is constant. During the digital revolution, the process of dematerialization of the image continues to deepen.

Digital media are characterized by the possibility of different performances of the same digital image. Lev Manovich lists five basic hallmarks: numerical representation, modularity, automation, variability and cultural transcoding<sup>4</sup>. Each object of the new media is therefore a number subjected to algorithmic processing; it is characterized by modularity, variability: the digital image should not be regarded as a single existence but as a multiplicity of potential implementations. Another property is generativity: the image ceases to refer to reality, which means replacing the performance with a presentation. The picture then takes on a form described by Jean Baudrillard as a simulacrum<sup>5</sup>.

---

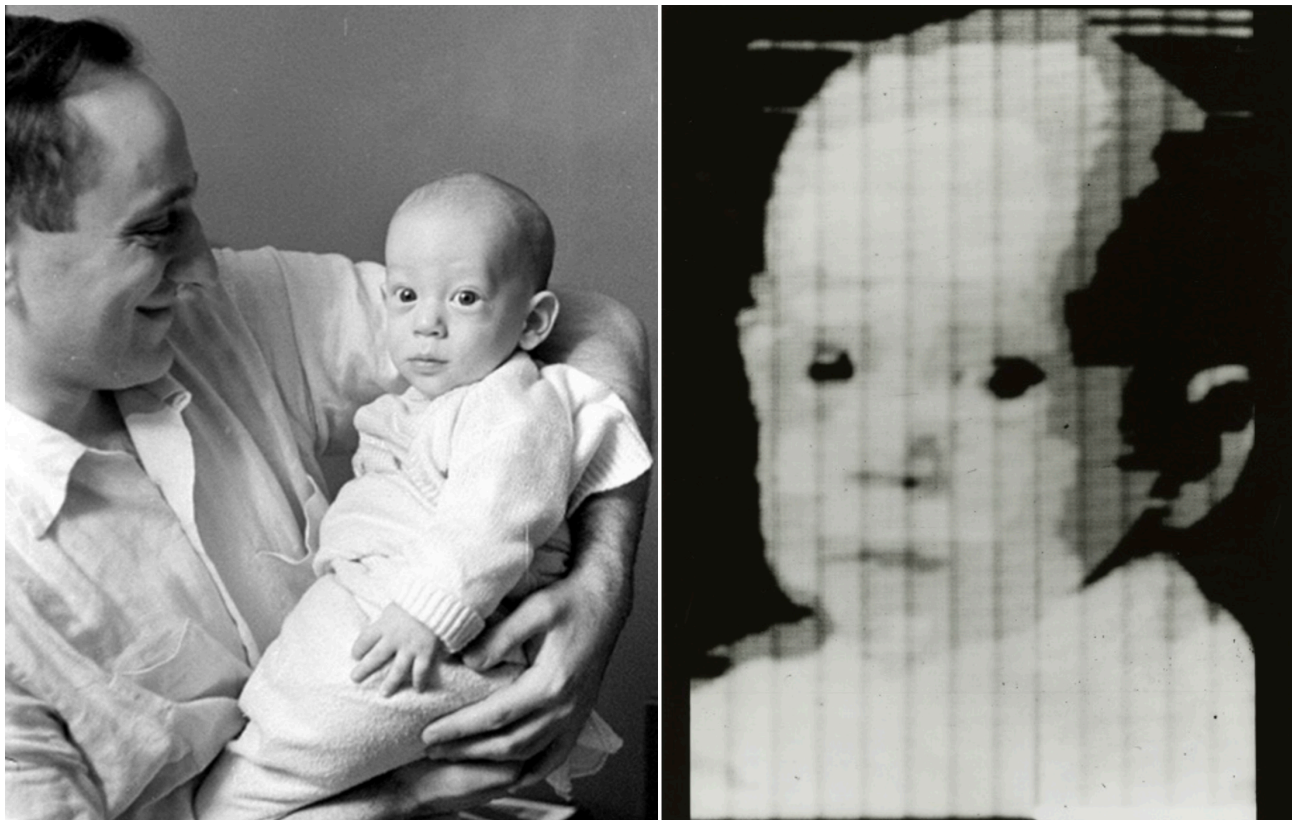
<sup>3</sup> "Electronic images (...) are the result of collisions, collisions between electrons and the surface of the screen, so they should be called a 'technological disaster of images'. Digital images, on the other hand, would be assigned the status of performance images. I would say that they have some kind of durability, and not ephemerality". R.W. Kluszczyński: "Obrazy nomadyczne i postobrazy. Transformacja, transgresja i hybrydyczność w sztuce nowych mediów.", Łódź 2015, p. 29

<sup>4</sup> See L. Manovich: "Języki nowych mediów", translated by P. Cypryański, Warsaw, 2006, p. 91-118.

<sup>5</sup> See J. Baudrillard: "Symulakry i symulacja", translated by S. Królak, Warsaw, 2005.



Source photograph (left) for Russell Kirsch's scan (right)



Source: <https://enter21st.com/the-inventor-of-the-pixel-passes-away-on-the-age-of-91/>

## The interactive revolution

The fourth revolution concerns interactive artistic imaging forms. Interactive media is definitely dominated by digital media. They appear already in the 1950s<sup>6</sup> and are of course improved in later decades with the rapid development of, and fascination with, new technologies. Virtual interactive environments treat traditional imaging differently from the ones described above. In addition to the appearing on the screen right in front of the audience (as has been the case so far), they surround the viewers from many sides, engaging additional senses. In this way they allow you to experience virtual reality almost physically. Not only these images do not present anything but themselves; they are also manipulated by the audience / viewers / users. They pass through smoothly, connecting with

---

<sup>6</sup> The work of Nicolas Schöffer is an example.



the reality of the addressee. Interactive media can appear on a flat-screen monitor and they might as well be in an interactively managed virtual environment.

We can also see many examples in which the above-mentioned types of imaging combine one with another. Virtual objects in hybridization processes intertwine with material objects to create autonomous environments. So, instead of images-events we get images-tasks<sup>7</sup>.

## The network revolution

Individual visual revolutions should be regarded as consecutive phenomena arising one from another. These are consequences in a logical rather than a temporal sense because it is difficult here to fit this complex process into a strict chronology. To a large extent, these are stages of the complex course of the transformation of the image world, maturing in its sophistication. Technical images turned into electronic ones, these turned into digital ones, and the next ones became interactive to end in the network. Importantly, subsequent forms of imaging retain the properties of the previous ones.

The automation of images transforming into their automatization, characteristic of the technical revolution, was supplemented by the eventuality of non-existent electronic images, and then also by the executive mode of digital images. The interactivity, which preserves numerical durability of digital images, has put them all into the process of endless transformations initiated by users. Together, they all have created the paradigm of the new iconosphere, which we are now referring to in the processes of creating, interpreting, and using images. What has been added to this paradigm as a result of the network revolution? Images have been linked one to another in the network, but they themselves have turned into networks<sup>8</sup>.

When thinking about a network at this point, it should not be narrowed down to the Internet. In addition, you can mention Ethernet, telephone or geolocation networks that use wired or wireless connectivity. On the other hand, other levels of networks can be created within them. This allows artists to create works in a virtual space that is accessible to the viewer / recipient only through a

---

<sup>7</sup> Authors including R.W. Kluszczyński use terms such as “image-task”, “image-event”, “image-environment”, “image-object” or “image-post-image” in the current discourse about imaging.

<sup>8</sup> R.W. Kluszczyński: “Obrazy nomadyczne i postobrazy. Transformacja, transgresja i hybrydyczność w sztuce nowych mediów.”, Łódź, 2015, p. 33

VOLUME 1, ISSUE 1 (2020)

**Widok wystawy Les Immatériaux, Centre Georges Pompidou, Paryż,  
1985**



Źródło: <https://www.e-flux.com/architecture/superhumanity/66879/spatial-thought/>

network connection, through connectivity to other servers<sup>9</sup>. Another way of receiving their work is impossible. Breaking down certain technological barriers and the emergence of the World Wide Web becomes the basis of the new digital image.

In 1994, Bradley University and the Peoria Art Guild organized a competition for artists who wanted to present their works on the World Wide Web, resulting in The Digital Photography Exhibit. Digital photography was then defined as a two-dimensional image created by optical devices and then “finished” on the computer.

Galleries, museums and other institutions, not only cultural, began to rapidly absorb and use the new opportunities offered by the internet – not in response to the underground activities of internet artists at the time but rather as part of a joint action – deciding to reach the audience also virtually, via Web sites. Some universities and academies turned into places of change – the Internet (used so far for military and scientific purposes) has started to be used for educational and research purposes in the field of art. Libraries had already adopted it in text-only form (gopher-sites) a few years earlier.

In 1985, one of the events leading to the emergence of net art <sup>10</sup> was the exhibition at the Centre Georges Pompidou in Paris, entitled Les immatériaux, curated by philosopher Jean- François Lyotard. Invited artists created works using the Minitel<sup>11</sup>.

The attractiveness of the new medium was also due to the strong belief that it had just emerged free from censorship and all restrictions, accessible to virtually everyone, way to reach the recipient directly. Net art develops in many directions, from interactive literature to simultaneous online meetings. Over time, it has also become apparent that artistic activities taken on the Web (over time less and less anonymous) can have consequences in the real world.

---

<sup>9</sup> Linz, Austria, 1995. The Ars Electronica festival introduces the term “net-art”, which signals the coming of a new stage in the evolution of contemporary culture.

<sup>10</sup> The term “net-art” was born 1995 in and described a domain that used to be ignored by the most of the mainstream art world.

<sup>11</sup> The videotext system operating online, accessible through PSTN lines, implemented in France in 1982 by France Télécom and by La Poste

## What next?

The technical revolution introduces a machine and mechanical imaging methods into the art world, the subsequent electronic revolution makes the image, hitherto established in a material medium, take the form of a signal that requires decoding, becomes an image-event, literally: it happens on the monitor screen. The digital revolution complicates the situation further because, thanks to the numerical recording, the image acquires the character of an open score to be performed. The interactive revolution makes us think of an image-task with which our relationship – like the whole participatively hybrid reality in which it takes place – is undergoing a significant transformation. Finally, the network revolution that brings out its virtual and transmedia nature from today's image<sup>12</sup>.

In this constant process, of course, the very aesthetics of the revolutionized images are also changing. Compared to classic images, i.e. photographic and film images, digital, interactive and Web images (although they share a common history and are still experienced as images) have completely different characteristics and different ways of functioning. As a result, the image ceases to be a representation, becomes an environment or interface of an interactive experience. The omnipresent interactive screens of mobile devices, smartphones and tablets reinforce the process. Thus, they deprive us, the audience, of reasons to call the content of screens “images”. Nevertheless, in the minds of many audiences-users, they are constantly experienced as images in the traditional sense. Probably only because of habituation, which will also weaken with increasing awareness of new generations.

---

<sup>12</sup> R.W. Kluszczyński (ed.), D. Rode: “Trajektorie obrazów. Strategie wizualne w sztuce współczesnej”, Łódź, 2015, p. 7

# REFERENCES

J. Baudrillard: "Symulakry i symulacja", translated by S. Królak, Warsaw, 2005

L. Manovich: "Język nowych mediów", translated by P. Cypriański, Warsaw, 2006

A. Renaud: "Obraz cyfrowy albo technologiczna katastrofa obrazów", Krakow, 1997

R. W. Kluszczyński (ed.), D. Rode: "Trajektorie obrazów. Strategie wizualne w sztuce współczesnej.", Łódź, 2015

P. Zawojski: "Cyberkultura jako nowy paradygmat kultury medialnej. Rozważania teoretyczne." in

E. Wilk (ed.), I. Kolasińska-Pasterczyk: "Nowa audiowizualność – nowy paradygmat kultury?", Krakow, 2008

P. Zawojski: "Cyberkultura. Syntopia sztuki, nauki i technologii.", Warsaw, 2010