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# Discussing five issues of post-material art

**ABSTRACT**

*The classification presented here will condense into five categories the adjectives, concepts, artworks and topics of discussion that are related to 'post-materiality', understood here to mean those art practices that are related to artistic physicality in some shifted way by being objectless artworks or works beyond physicality. I present several elements that are related to the history and theoretical background of this question. The immateriality, dematerialization and non-materiality of art will be considered in the context of digital art and culture. We can follow artistic concepts related to immateriality in the late 1950s, discussions on dematerialization of art in the late 1960s and the appearance of 'immateriality' in the 1980s. 'Immateriality' emerges again in the early 1990s, this time in association with the digital environment, and has remained a much-discussed term and more of a metaphor up to the present since so-called immaterial digital art is in fact a labour-intensive and material-intensive sphere. In observing the experimental and theoretical activity around artistic technologies over the past 50 years, it is possible to discern two directions: first, dematerialization in the context of non-technological art, and second, immaterialization of the art object in the context of technological art.*

**KEYWORDS**

non-material art  
shared authorship  
process-based art  
multi-local  
telematic  
ephemerality  
post-materiality

There are many names for non-material art and immaterial artistic activity. Digital art is 'traditionally' associated with 'immateriality'. At the same time it exists on quite a solid material basis, despite the fact we can use a selection of adjectives and concepts that describe issues connected with art and not much for the artworks themselves.

Although these phenomena have previously been viewed in terms of artistic movements or trends, decades or artists, in this article I would like to present more universal tendencies that pervade different eras, media and ways of creating art as creative currents that I would refer to as non-material art, indeterminist artistic practice and post-material art.

Let us call them 'five issues of *post-material art*'.

Here is a classification of adjectives that could be grouped under different artistic concepts and artworks:

1. Artistic concepts and artworks associated with the *artist's authorship* questions (works with common authorship, shared authorship).
2. Artistic concepts and artworks associated with the question of artwork as the result of activity and the *absence of the art object* (objectless, immaterial, intangible, transient, temporary, ephemeral, non-existent, absent, sedentary, mobile, variable, digital, conceptual).
3. Artistic concepts and artworks associated with questions of *imparting* information concerning a work of art, the transmission of information concerning a work of art as a temporal process and delay in transmission as a part of a work of art (communicative, multi-local, telematic).
4. Artistic concepts and artworks associated with the question of the *artwork as a process* in their relationships with the physical work of art or its absence (procedural, generative, algorithmic, systematic, epigenetic, rule-based, combinative, participatory, active, action-based, interactive).
5. Artistic concepts and artworks associated with the questions of *uniqueness of a work of art*: multiple author's copies of one work of art (*multiples*), one work of art as multiple objects, one work of art from multiple arts, from the content of media (serial, multi-local, interactive, telematic, communicative, digital, multiple, non-unique, non-singular, of divided materiality, hybrid, mixed, remix, multi-media).

The question is whether it is possible, on the basis of the artistic subject matter described and analysed in this article including the *authorship, materiality, representation and transmission, and uniqueness of a work of art, and the process of creating art*, to find an *invariable factor* that combines all of these factors.

My assertion is that art is not physical and material reality, but rather an indefinable and purposeless reality based on transient objects, variable materiality and random or purposeful activity by way of matter (or its absence) and sometimes-active agents. Nowadays, art takes place in post-material space that ties physical objects, people, nations, institutions and communications networks together into a perpetually changing self-organizing sphere and flowing space functioning between system and chaos. Art that is born in this environment can be referred to as *post-material art*.

The aim of this article is to render significant the vague and indefinable that lies *between works of art, artists and works of art, artists, artists and the public, the material state of works of art and objects that form a work of art*. It is not defined and determined by time, space, material and authorship.

The determination of this field of study is *one* of the aims of this study. Its *second* aim could be referred to as the specification and definition of certain recurrent patterns that can be noticed in art associated with new media. Its *third* aim is to observe non-material and open creative work in the context of art history as perpetual cultural practice that is part of human activity.

To some degree, this study 'contends with' stereotypes set in art history and writings about art: that a work of art is material, permanent, sedentary; that it has a certain author; that art is a comprehensible system; and that the best is found at the summit of its hierarchy. I would like to bring the opposite to the forefront with the objective of making the overall picture more complete. Since in my artistic experience I have come in contact with that which contradicts the object-oriented and permanent, my intuitive wish is to also demonstrate this.

Nevertheless, it must be pointed out that human nature and culture cannot be changed since it is founded on memory. This means that we need anchor points in order to comprehend phenomena and interpret the results of human activity – facts, names, words, emotions, sensations of sensuous and mental origin that become raw material for consciousness in the creation of rational interpretations, theories and other such 'narratives' and 'models'.

We can notice persistent tendencies towards the dematerialization of works of art and non-material art that take place through three approaches: (1) doing away with and dissolving objects of art, as we can see in conceptual and performance art, (2) the adoption of new artistic materials that we can observe since the 1950s and (3) the adoption of electronic media and digital technology, which has been taking place since the 1960s. These developments should be seen as being interwoven within the framework of certain works and exhibitions.

The answer to the natural question of what will ultimately change if art dematerializes, immaterializes, if art is dissolved, if the objective is not the creation of an object of art, but rather an open process, can be that something will change but much will remain the same.

Three aspects will change the most: *first*, the position of the public will be altered into that of a co-author; *second*, the artist's position, as the one who presents the work of art as a participatory context, will also become that of a co-author and part-author; and *third*, a 'universe' of different kinds of temporary works of art will come into being, an environment where works exist thanks to the media used to represent and transmit them. The fact that in order to speak of phenomena including art, researchers and even artists themselves need anchor points in the form of objects, facts or words that form the basis for discussions of the material existence of a work of art and the creative process, will remain the same.

1. Artistic concepts and artworks associated with the *artist's authorship* questions (works with common authorship, shared authorship).

The development of authorship has a cultural, historical and economic impetus that has shaped the institution of authorship for hundreds of years. The topicality of the dispersal and collapse of authorship in today's creative field of the Web will also hopefully become clear. The revolt against authorship, originality and everything made with the author's own hands is one of the features of twentieth-century art that is perfectly realized in today's environment of the Internet and interactive art.

I would cite as a classical example the work of Yves Klein, who left a vivid imprint on twentieth-century art with 'Anthropometries', which were paintings with nude models, that he began in 1958. In a similar way authorship was 'shared' in his fire paintings, which he created collaboratively with a fireman.

Roy Ascott's 'Change-Paintings' and 'Hinged Reliefs' (1959–1961) were open for audience participation. 'Change-Paintings' were interchangeable

transparent panels that could slide behind each other within a rectangular framework by the manipulation of the spectator (Ascott 2007: 150).

If we come to the digital environment there are two main differences in authorship: first, an artist is the author of rules, principles and combinations that probably result in diverse works; second, an artist is a link in the network of relations, and the 'work' could be a network-related and collective 'object', in the form of either software or a communicative artwork.

Since the number of works with distributed and dispersed authorship in today's digital art is immense, I will limit my description to three of the most contrasting fields of digital art, which could be described as: (1) sharing authorship with animals and plants, (2) interactive projects of participatory painting and (3) contemporary forms of participatory film. For the sake of establishing background, I would mention Lev Manovich's opinion of post-media and post-net culture, in which authors and users are those involved in shaping information and information behaviour (2001).

The examples where authorship is shared with the animal and plant kingdoms are Ken Rinaldo's *Augmented Fish Reality* (2003), Christoph Ebener, Frank Fietzek and Uli Winters's *HAMSTER – Symbiotic Exchange of Hoarded Energy* (1999), Garnet Hertz's *Cockroach Controlled Mobile Robot #2* (2005), Yasushi Matoba/Hiroshi Matoba's project *Micro Friendship* (1999), Stadtwerkstatt's installation and action *Bugrace 99* (1999), Eduardo Kac's transgenic project *Genesis* (1999), Christa Sommerer and Laurent Mignonneau's interactive installations *Interactive Plant Growing* (1993–1997) and *A-Volve* (1994/1995) and Ken Goldberg's *Telegarden* (1995–2004).

Interactive participatory paintings characterize the territory of digital art that relies on examples of previous participatory art and sound/vision machines. Examples are Toshihiro Anzai and Tamio Kihara's 'Moppet' (1997), spatial paintbrush; 'Body Brush' (2002) by Young Hay, Horace Ip and Alex



Figure 1: Ken Rinaldo, *Augmented Fish Reality* (2003), © <http://www.kenrinaldo.com/>.

Tang Chi-Chung, Jackson Pollock's translating method into spatial digital painting and Golan Levin's synaesthetic painting projects 'Audiovisual Environment Suite' (AVES, 1998–2000) and 'Scribble' (2000).

With respect to participatory films, numerous examples from the category of 'interactive film and cinema' could be mentioned, starting from Radúz Činčera's famous 'Kinoautomat' and interactive movie 'Man and his world' during EXPO'67 in Montreal to many theatrical presentations of films such as 'The cause and effect show' by Chris Hales (GB) and Teijo Pellinen (Finland), who staged dozens of performances during the decade of 2000 in which audiences used a variety of items to interact with the moving image. Shouting and noise-making along with the films became a compulsory experience during their performances and in some cases a 'shoutometer' registered the decibels of the audience's shouts, the decision on the direction of development of the film being made according to the results.

2. Artistic concepts and artworks associated with the question of artwork as the result of activity and the *absence of the art object* (objectless, immaterial, intangible, transient, temporary, ephemeral, non-existent, absent, sedentary, mobile, variable, digital, conceptual).

Again Yves Klein's practice would be suitable to provide a classical example. Monday, 28 April 1958 is of particular importance, when at 9 pm, Yves Klein opened his exhibition of the void 'Le Vide' (The Specialisation of Sensibility in the Raw Material State into Stabilised Pictorial Sensibility, The Void) at Iris Clert's gallery in Paris. In this exhibition, Klein exchanged 'immaterial pictorial sensitivity zones' for pure gold. The ritual of relinquishing an immaterial pictorial sensitivity zone was described in detail in the respective document (Klein 1958). His lecture with the title 'The evolution of art towards the immaterial' given in the Sorbonne in June of 1959 should also be mentioned (Klein 2004: 35–45). His manifesto (Klein 1961) written in the Chelsea Hotel in New York in 1961 ends with the words 'Long Live the Immaterial!'

Attention should also be directed to Klein's idea of 'Air Architecture', about which he wrote in 1958 that the classical city of the future will be built of fire, air and water. This kind of city is infinitely flexible, spiritual and immaterial.

In association with the dematerialization of art, it has become canonical to refer to the article by Lucy R. Lippard and John Chandler 'The dematerialization of art', which appeared in the February issue of *Art International* in 1968. They saw 'ultra-conceptual' art budding from two directions: art as an idea and art as action.

This 'ultra-conceptual' means placing the emphasis on the thought process and that the work of art is becoming more of a planned product. This is also conditioned by the fact that a large number of artists have lost interest in the physical evolution of a work of art (Lippard and Chandler 1999: 46).

Tendencies towards the dissolution or metaphoric dematerialization of the art object were obviously international. Lippard also confirms this in her later writing – that at the same time, when meeting with colleagues in different American cities and hearing about the same kinds of developments in Europe that led to conceptual art, she became convinced that 'ideas were in the air' and developments took place in parallel. She considered Marcel Duchamp as their most important art historical source (Lippard 1997: ix).

Jacob Lillemose refers to Lippard in suggesting the differentiation of dematerialization as an act and immateriality as a condition, in his discussion

of the art of the end of the 1960s, and the phenomenon of dematerialization that is mostly associated with conceptual art, tying them to popular scientific theories at that time, for example with system theory (Lillemose 2005).

'Les Immatériaux'/'Immateriality' organized by Jean-François Lyotard and Thierry Chaput at the Pompidou Centre in Paris in the spring of 1985 marked an important change in the museo-graphic tradition. It included conventional exhibition objects and more contemporary technology. Nowadays this event has emerged into the field of vision of researchers both as the predecessor of the technological sphere of art and a gigantic multidisciplinary exhibition that did not lack philosophical ambitions. Lyotard writes in the press release for 'Immateriality' on 8 January 1985:

Why 'Immaterials'? Research and development in the techno-sciences, art and technology, yes even in politics, give the impression that reality, whatever it may be, becomes increasingly intangible, that it can never be controlled directly – they give the impression of a complexity of things.

In keeping with chronological presentation, 'new media' should be considered briefly in the context of the artistic and material experiments of the 1960s and 1970s, as considered by Frank Popper in the book *Art – Action and Participation*, published in 1975. What is 'new media' in Popper's treatment? Dematerialization, light and plastic materials are new media. New materials, material experiments, new material technologies. He considers the disappearance of the object and he associates this with the following developments: participation of the public, the architectural factor and the use of new, non-solid plastic materials. Attention is directed to the viewer, who is given the power to make permutations and combinations, which weakens the status of the object or 'chef-d'oeuvre' (Popper 1975: 13).

Among others who challenged the physical existence of an artwork is Keith Arnatt with his written concepts 'Is it possible for me to do nothing as my contribution to this exhibition?' (1970) and 'Did I intend to do this work?' (1971), in which the artist presented descriptions and instructions for his possible work as a work. In 1970 John Baldessari cremated all of his works made between May 1953 and March 1966. These are radical gestures that present the artistic act as an object and a fact.

As stated earlier, this category of 'absence of the art object' can embrace works that are described by the words *objectless, immaterial, intangible, transient, temporary, ephemeral, non-existent, absent, sedentary, mobile and variable*. This also means works that could be part of some other category describable by means of its artistic method of composition (algorithmic, aleatoric, auto-destructive, etc.) or through a definition of collaborative practice (performance art, body art, etc.).

3. Artistic concepts and artworks associated with questions of *imparting* information concerning a work of art, the transmission of information concerning a work of art as a temporal process and delay in transmission as a part of a work of art (communicative, multi-local, telematic).

Does a work of art necessarily have to be represented by a final object? Can the communication between users/viewers be a separate object of art? Can the user's communication by various networks, in discourse with other people or programmed environments, be comparable to the situation where the user communicates with a work of art in a museum or gallery? Should a telecommunicative electronic relationship between at least two objects

separated in a room also be seen as an aesthetic object? What should one consider a work or material of art anyway?

The 1980s are important when it comes to formulating ideas and applications of telecommunicative art connected to technology as a result of the discourses of Roy Ascott, Fred Forest, Mario Costa, Robert Adrian and others (Forest 1983; Ascott 2007: 185). From that point forward, it was primarily the technology that developed. Applications had already been put into words, which were described in phrases such as:

Time and Space will constitute the artist of tomorrow's 'raw material'; Just as down through the ages he has worked tone, marble, wood or metal, he must now attempt to leave his mark on these 'immaterials'; In the age of electronics and telecommunications, man is making his way further and further towards a less concrete relationship with reality, towards the dematerialisation of his everyday experience; the contents of the exchange change from the mechanism of exchange itself; the specificity of communication art is about creating events instead of material objects; the creation of a network of discrimination-free human relations; telecommunication art depicts itself as a culmination of the dematerialisation process of the object of art etc.

(Forest 1983)

All of this sets the coordinates of the attitude, which the developments of the 1990s rely on.

In characterizing the *multi-local object of art* in terms of a new digital cycle (in the 1990s), a simplifying classification to characterize the communicative art of the 1990s would be as follows: personal, physical, intimate; architectural and environmental; interlocal art – interactive and communicative installation in physically connected rooms; and communicative text or software environments on the Internet. The art of Eduardo Kac, Paul Sermon, Stelarc, Rafael Lozano-Hemmer, Laurent Mignonneau/Christa Sommerer and others could be involved in this discussion.

4. Artistic concepts and artworks associated with the question of *artwork as a process* in their relationships with the physical work of art or its absence (procedural, generative, algorithmic, systematic, epigenetic, rule-based, combinative, participatory, active, action-based, interactive).

Here we can list artworks and artistic directions that were opposed to object-based and commercial attitudes in contemporary art. We can include in this category a vast amount of *creative machines* and *indeterminist practices*, starting from Tristan Tzara's instructions 'How to write a dadaistic poem' to contemporary generative or software-art projects. At the same time artworks and proposals might also be included – from Fluxus, happenings, performance art, performative painting (e.g. *Schaumalen* by Hermann Nitsch), telecommunication art, interactive art – all of which had the goal to involve the audience in some activity and not to produce an object or physical artwork.

Despite the fact that we can talk about the process-based artworks as transient facts (e.g. Jean Tinguely's *Hommage to New York* [1960] and *Study for an End of the World, No. 2*. [1962]), their recorded documentation, including photographs and films, physical outcomes and remnants, are preserved in museums or presented in exhibitions as artefacts. This means that even when the artist had in mind an escape from the creation of a commodity, they still fell into the trap of the conventional commercial and institutional artworld. I



Figure 2: Stelarc, Ping Body (1996), © <http://v2.nl/files/1996/works/ping-body-doc/9609A0012.jpg/view>.

doubt that future generations will disapprove of these artists, such was their contribution to history.

What this means is that in applying the words ‘artwork as a process’ to some facts we assume some kind of stable materiality or facticity. The artwork as an object is not completely non-existent. Mostly it means that it is the *process* that is brought to the foreground, rather than the non-existence of physicality. The process is the goal in itself and depending on the context we can call it *game, play, performance, collaboration* or *entertainment*. ‘Relational art’ could also be part of this category. With respect to archaic creative practices such as dance, collaborative games and rituals, probably one purpose of these *process-based activities* was the achievement of social coherence.

5. Artistic concepts and artworks associated with the questions of *uniqueness of a work of art*: multiple author’s copies of one work of art (*multiples*), one work of art as multiple objects, one work of art from multiple arts, from the content of media (serial, multi-local, interactive, telematic, communicative, digital, multiple, non-unique, non-singular, of divided materiality, hybrid, mixed, remix, multi-media).

Daniel Spoerri, who coined the term ‘multiples’, founded Multiplication d’art Transformable (MAT) in 1959 and produced multiples by Marcel Duchamp, Man Ray, Dieter Roth, Ben Vautrier, Arman, Jean Tinguely, Victor Vasarely and many others. We can say that he violated the notion of the originality and uniqueness of art. Naturally, we might mention Duchamp’s multiplications dating back to the 1930s, but the editions produced by MAT formed an intentional distribution system, which was a presursor of artistic networks as they emerged on digital ground. Artists recognized the social function of Edition MAT: Portable, decentralized and easily communicated forms of

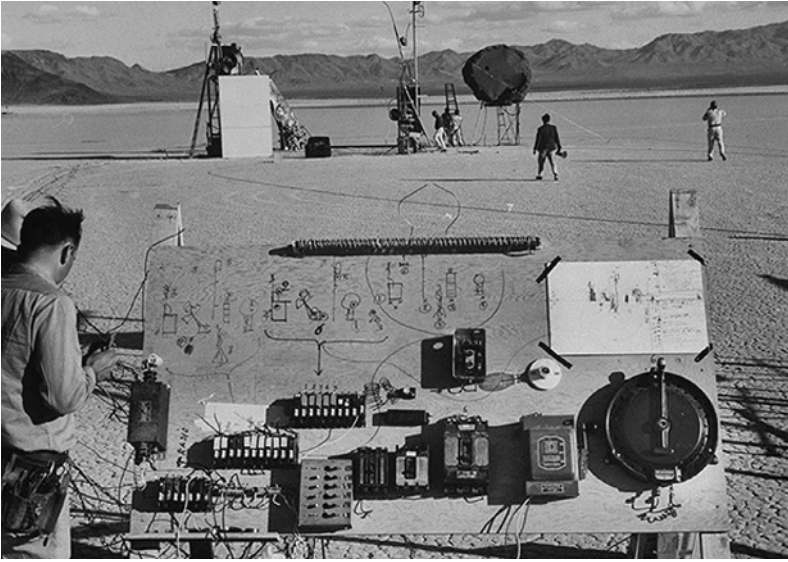


Figure 3: Jean Tinguely, *Study for an End of the World, No. 2* (1962), © <http://www.pprocess.ch/en/focus/44/jean-tinguely.html#&gid=1&pid=10>.

Conceptual Art meant that artists could participate in these new ideas across national boundaries (Wye and Weitman 2006: 20).

Artworks could themselves contain other artworks or ready-made objects made by other artists – as realized by Sherrie Levine, Joseph Kosuth, Damien Hirst and others – or can be completely open for the re-combinative activity of the audience (e.g. Karl Gerstner, *Variables Bild*, 1957/1965, and Utz Kampmann, *Maschinenplastik*, 1971). A more radical change to uniqueness in art is occurring in multi-local, tele-communicative, relational, appropriative, interactive and multimedia art: authorship here is more fluid, not fixed. Artworks become like events occurring between different agents in different locations – as in the tele-com art of Rafael Lozano-Hemmer, Eduardo Kac, Sommerer/Mignonneau, Paul Sermon and others – or they are network-based net.art projects such as Jodi.org, collaborative 'Refresh-Project', initiated by Vuk Ćosić, Alexei Shulgin, Andreas Broeckmann (subtitled 'Multi-Nodal Web-Surf-Create-Session for an Unspecified Number of Players', 1996), Heath Bunting's 'Own, Be Owned or Remain Invisible' of 1998, and others.

In the context of the above, long before the notion of *digital immateriality* we can talk about art that is undefined materially and in terms of objects in the context of non-electronic art.

We see four important manifestations that I would point out as a form-oriented classification: *first*, the expansion of the concept of artistic materials through the import of new materials (plastic, iron, glass, rubber, concrete and so on); *second*, the avoidance of physical and object materiality (Klein's 'immaterial sensitivity zones', conceptual art, the use of Takis's magnet energy, the use of light as an artistic material, the movement component of a work of art as part of the work); *third*, the inclusion of the public, who are offered the opportunity to participate (Fluxus's instructions for behaviour and games with which the audience can join in, kinetic objects that the

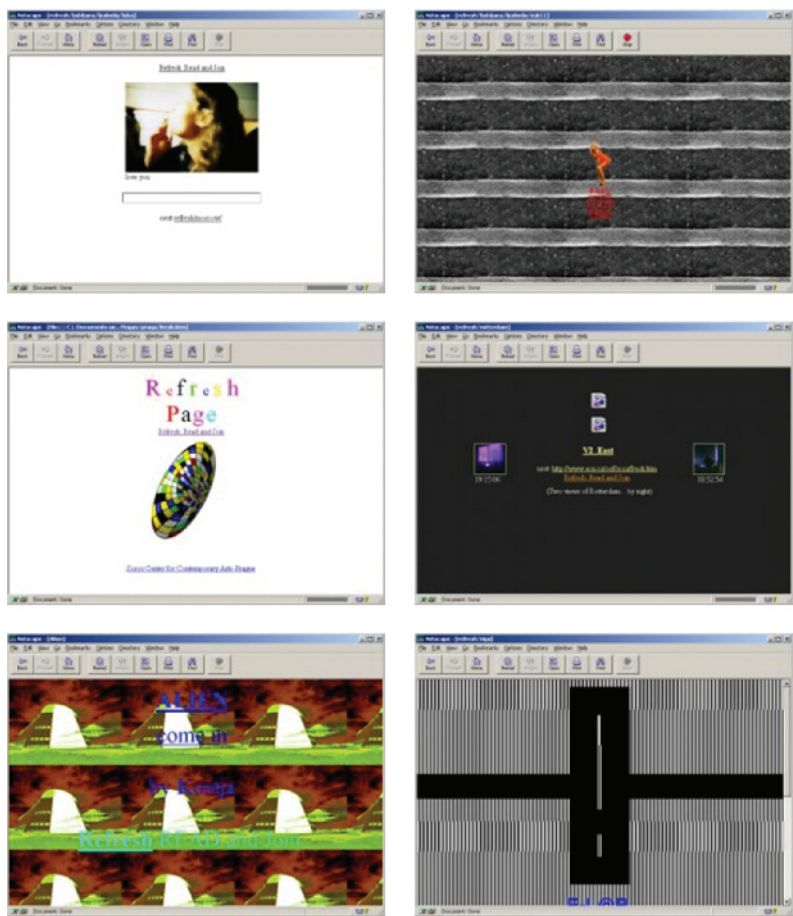


Figure 4: The Refresh Project (1996), © <http://free.janezjansa.si/blog/2015/01/28-the-refresh-project/>.

public can switch on or physically push into action, and so on); and *fourth*, we can add algorithmic and generative compositions that were presented, for instance, at the New Tendencies exhibitions, which, despite their mathematical nature, were manually carried out: in other words, tangible art in the background of which a certain interest in relation to the natural laws governing visual perception could be surmised (Manfred Mohr, Victor Vasarely and others).

The aim of the previous classification has been to condense into five categories the adjectives, concepts, artworks and topics of discussion that are related to the theme of *post-materiality*. This means art practices that are related to artistic physicality in some shifted way, being non-object-artworks. I attempted to present several elements that are related to the history and theoretical background of this question.

The immateriality, dematerialization and non-materiality of art are nowadays situated within the context of digital art and culture.

While non-materiality in the 1960s is mostly in the meaning of dematerialization (in the sense of reducing the matter that the work of art consists of) then later, beginning already in the 1970s – and pronouncedly since Lyotard's exhibition in 1985 – non-materiality has become immateriality, and this is associated with technological affordances. It is important to follow the manifestations of artists and groupings that have aspired to purge art from matter and pictoriality and make art investigative – including constructivist groupings, the objective of which was to deal with art under the auspices of 'visual investigations'. 'Immateriality' emerges again in the early 1990s, now in association with the digital environment, and has remained a much-discussed term and more of a metaphor up to the present, since so-called immaterial digital art is in fact a labour-intensive and material-intensive sphere.

In summary, in observing the experimental and theoretical activity around artistic technologies over the past 50 years, it is possible to see two directions: first, dematerialization in the context of non-technological art, and second, the immaterialization of the art object in the context of technological art.

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