1. INTRODUCTION

We can describe art as an asynchronous delivering of messages over physical or time distance. It maintains presence from the past and from far away, distant presence. Masters have been making artworks which are perceived by audience hundreds and thousands years later. It could be, that the sender of the artistic message has not been in existence for millennia (like authors of cave paintings). In this case, interaction between sender and recipient is not possible, but still, the act of delivery exists as there is a receiver.

We could create an imaginary axis of reception divisions, based on delay, where there are works of art on one side, whose ‘transmission’ to the receiver has lasted for millennia; and artworks sent and received in real time on the other side. Although this kind of formulation points to the vocabulary of information theory and though this viewpoint has been considered, art in this presentation has not been dealt with in this way.

Delays between performative acts and non-materiality in participative works are substantial attributes in new media art, but there are many examples in earlier art practice and art of the 20th century, which belong to the rich history of non-material art.

My interest in delay concerns its ability to be part of the concept, when delay between sequences of creation, elements of time-based artwork, exposition and reaction or feedback becomes an integral part of the interaction with the artwork and inseparable from it. Naturally, we can distinguish other episodes of delay, like one which is happening between creative intention of the artist and creative execution of the artwork.

2. FROM PAINTING BY TELEPHONE TO INTERNET ART

László Moholy-Nagy’s “Telephone Paintings” were made in 1922 and were almost the first examples of early telecommunication art. Evidently, as historians write, he got his ideas from „Dada-Almanac”, which was edited by Richard Huelsenbeck in Berlin in 1920. Huelsenbeck
presented the provocative notion that images could be ordered by telephone. It inspired László Moholy-Nagy, who lived in Berlin. [1]

László Moholy-Nagy wrote:

“In 1922, I ordered by telephone 5 paintings in porcelain enamel from a sign factory. I had the factory's colour chart before me and I sketched my paintings on graph paper. At the other end of the telephone, the factory supervisor had the same kind of paper, divided into squares. He took down the dictated shapes in the correct position. (It was like playing chess by correspondence.) Thus, these pictures did not have the virtue of the "individual touch," but my action was directed exactly against this overemphasis. I often hear criticism that because of this need of the individual touch, my pictures are “intellectual””. [2]

We can say that in 1922 the first attempt was made to create and deliver a computer graphic picture over distance. The author was „removed“ from physical result of his work.

If we think more deeply about the process of creation of Moholy-Nagy, then there are different steps, activity and delay sequences: delay between when artist is telling which square to colour and the factual colouring of it in the sign factory. Then, after the information has been delivered, an enamel painting was produced. There is a second delay between the second and third activity. After the physical paintings were sent to author, there is a third delay, or feedback which shows how the message was understood. Then, paintings are exhibited, the visitor/audience sees them, visual information is transferred directly to the viewer. The time between presentation and reception is the fourth activity sequence and delay.

We can describe this Moholy-Nagy’s order of telephone painting in the terminology of an information model: sender, message, transmission, noise, channel, reception, receiver and feedback. Moholy-Nagy, the artist, is the information source and sender of information, in between there is noise - which is irrelevant, as we see - information was received by the supervisor correctly.

According to traditional understanding, delay in aesthetical communication could be defined as time which lies between completing the artwork by the artist and the perception of it by the viewer.

What I want to discuss is the disappearance or shortening of the delay between when the creator has finished the artwork and when viewer perceives it; and the situation where (by means of interactivity), the act of creation and the act of perception belong to the performative telecommunication artwork. Another interesting aspect is the inter-relation and exchange between creation and perception, so that perception and action, where it leads, becomes input
for the next act of creation. There is a situation, where presentation of an art object becomes a
performance between the artwork and the user; it becomes time-based art were both the artist
and the creator and receiver are taking part and where feedback from the receiver becomes
input for artist, for the next stage of his creative activity.

Also, I would like to show that the delay between action and perception, or different
sequences of activity, could be an essential building element - it could belong to a functional
part of the artwork.

We can mention the delay which lies between instruction given by the artist and the execution
performed by the same artist or somebody else, similarly with programming code which is
written by the artist and will be executed by the computer or user.

3. PRE-DIGITAL ART EXPERIMENTS

I would like to characterize the fact that delay has been point of interest in earlier electronic
artworks, bringing two examples: Richard Serra “Boomerang” (1974) and Dan Graham’s
“Time Delay Room” (1974). Works were done in same year and period, when experimental
activity of artists’ was internationally at the highest point.

To describe Richard Serra’s work, I’ll quote Rosalind Krauss sufficient description and
interpretation, where she analyses artists’ position inside the artwork, which is essential in
video-performances built on feedback.

“...a tape made by Richard Serra, with the help of Nancy Holt, who made herself its
willing and eloquent subject. The tape is called Boomerang (1974), and its situation is
a recording studio in which Holt sits in a tightly framed close-up wearing a
technician's headset. As Holt begins to talk her words are fed back to her through the
earphones she wears. Because the apparatus is attached to a recording instrument,
there is a slight delay (of less than a second) between her actual locution and the
audio-feedback to which she is forced to listen. For the ten minutes of the tape, Holt
describes her situation. She speaks of the way the feedback interferes with her normal
thought process and of the confusion caused by the lack of synchronism between her
speech and what she hears of it. "Sometimes," she says, "I find I can't quite say a word
because I hear a first part come back and I forget the second part, or my head is
stimulated in a new direction by the first half of the word."

As we hear Holt speak and listen to that delayed voice echoing in her ears, we are
witness to an extraordinary image of distraction. Because the audio delay keeps
hypostatizing her words, she has great difficulty coinciding with herself as a subject. It
is a situation, she says, that "puts a distance between the words and their apprehension-
their comprehension," a situation that is "like a mirror-reflection . . . so that I am
surrounded by me and my mind surrounds me . . . there is no
The prison Holt both describes and enacts, from which there is no escape, could be called the **prison of a collapsed present**, that is, a present time which is completely severed from a sense of its own past. We get some feeling for what it is like to be stuck in that present when Holt at one point says, "I'm throwing things out in the world and they are boomeranging back . . . boomeranging . . . eranging . . . anging.

Through that distracted reverberation of a single word-and even word-fragment-there forms an image of what it is like to be totally cut-off from history, even, in this case, the immediate history of the sentence one has just spoken. Another word for that history from which Holt feels herself to be disconnected is 'text'.

Nancy Holt finds herself in the “prison of a collapsed present” and such “self-encapsulation“ is visible in other video artists works, for which Krauss brings projects by Vito Acconci as examples. In this context this example shows the essential importance of delay, it belongs to the form and concept of the work. Delay between spoken and heard text deeply penetrates the perception mechanism of the speaker. The speaker is distracted to such extent that she is not able to form sentences. Additionally we can speak about a metaphorical level of being in the “prison of a collapsed present”.

The delay in Dan Graham work “Time Delay Room” belongs to the same sense. Visitor enters the room, where on one monitor he sees himself with 8 seconds delay, on the other screen view to the other room with same situation. Here the visitor will experience an uncanny situation where he sees himself as almost real-time feedback image and recorded image in the same one image.

Seeing himself as a delayed and mirrored image evokes intention to “freeze”, allowing image to “follow” the object, and intends to identify himself with the mirrored image through movement and action.

Gregor Stemmrich writes:

“The time-lag of eight seconds is the outer limit of the neurophysiological short-term memory that forms an immediate part of our present perception and affects this «from within». If you see your behavior eight seconds ago presented on a video monitor “from outside” you will probably therefore not recognize the distance in time but tend to identify your current perception and current behavior with the state eight seconds earlier. Since this leads to inconsistent impressions which you then respond to, you get caught up in a feedback loop. You feel trapped in a state of observation, in which your self-observation is subject to some outside visible control.” [4]
A game with the delay is visible in the Graham’s work “Yesterday/Today” (1975). Viewers in one room see a transmission from the other room but the sound recording has been made day before. As a result we see accidental overlap and divergement between image and sound. This two examples show us importance of delay and accident in the artwork. As a result there is constantly changing artwork, which challenges the viewer.

3. Multi nodal art

Fig. 1. Refresh project, 1996, collaborative internet project, http://redsun.cs.msu.su/wwwart/refresh.htm

There is historical internet artwork - Refresh project (1996) [5], by a group of artists and referred to as "Refresh - Art Project: Multi nodal net art", more than 20 WWW pages located in many servers of Europe and the US were linked together in a loop through which the visitor would be „thrown“ automatically after 10 seconds to another page. The project used a “refresh” meta-tag, a command within HTML. The command tells browser software of the PC of the user to automatically go to a particular page after a certain time. Refresh chain-pages take the user through all pages all over again. A refresh delay of 10 seconds is an integral part of the project.

Meta-tag looks like this:

<META HTTP-EQUIV="Refresh"
CONTENT="10;URL=http://www.priss.org/fresh.shtml">

It brings user to the web site http://www.priss.org/fresh.shtml. But it could be any other site also, there where twenty of them.
Andreas Broeckmann wrote:

“... the Refresh loop was designed to employ the interconnectivity of the computers and the software infrastructure to create one project that was simultaneously happening at more than twenty different locations, a genuinely distributed artwork whose experiential effect both depended on and transgressed the physical distance between the participants.” [6]

Fig. 2. FragMental Storm 02, 2002, Exonemo, internet project, http://www.exonemo.com/FMS/indexE.html

Another example is "FragMental Storm 02" by Exonemo (2002). Before its use it should be downloaded to a local computer. Explanation by author:

““FragMental Storm 02 (FMS02)” is a type of web browser. It uses keywords to search the Internet and displays corresponding data onto the screen. In conventional web browsers the graphics and text shown on the screen are positioned in accordance with instructions included in the mark-up language HTML. In contrast, FMS frees text and graphics from their HTML, scattering them randomly over the screen.” [7]

This work is constantly in redesign and regeneration. The result is changing, evolving and we can speak about another kind of delay, or waiting until the artwork complete (if the user ends it) or does not complete. It is endless - it is not repeating itself in detail, but still we can say that it becomes comparable, as it starts to look similar if we don’t intervene by clicking and refreshing it. It reminds us rather time based art, looping video installation and it has been exhibited as installation as well.
We can say that the delay here is rather traditional, not like in the Refresh-project, were it was an integral part of the artwork. Here the viewer or user is “requesting” visual composition. After that programmed code retrieves visuals and text from the Internet in real time and mixes them, it plays with them “creatively”. The viewer in fact is “ordering” the artworks next phase and it is “performed” and “delivered” to him. Everything is based on functional software designed by the artist.

We can describe all artworks which are defined as “participative” or “interactive” in the same sense. Artwork changes or presents its variations after user input, it gives feedback, and it talks back. Dependant on the complexity of the software or hardware it could happen more or less interestingly. A dialogue is taking place between the artwork and the user.

4. DIALOGUE AND DELAY

For describing the specific quality of telecommunication art, Eduardo Kac has used the terms “dialogism” and “dialogical art”. Kac [8] wrote that “there is a clear difference between dialogical art and interactive art (all dialogical works are interactive, not all "interactive" works are dialogical)”. Also, he wrote: “dialogical aesthetics is intersubjective and stands in stark contrast with monological art, which is largely based on the concept of individual expression.” [9]

Kac writes that the roots of contemporary dialogical art experiences can be traced back to this arc of experimentation ... —from modern avant-garde collaborations and interactive propositions to the dematerialized and participatory events of the sixties and seventies [10]. „Telepresence art offers dialogical alternatives to the monological system of art and converts telecommunications links into a physical bridge connecting remote spaces. “ [11]

After Kac [12] reason for appearance of dialogical art is „... increased dissatisfaction with concepts of art centred on the individual and on romantic heroic myths...“

Shortly we can describe dialogical art as art which produces new content during interaction with it and that the artworks’ physicality or visual, audible or other content is changing. The artwork is not the same in beginning as it is in the end.
I’ll bring for example a work by Nurit Bar-Shai, an online performance in three acts – "Nothing Happens" (2006) [13]. The author describes it as interactive telematic mixed media live streaming installation with custom made software:

“Nothing Happens, is a networked online performance in which viewers work together to make a series of objects tip over. The performance consists of three acts, which are centered around staged environments - a high shelf, a cluttered tabletop and an empty floor. Each scene contains a central protagonist, respectively: a cardboard box, a glass full of water and a wooden chair. In all three acts, web-enabled physical devices, controlled by viewer’s clicks, make these objects tip over. When this happens, the performance is over.”[14]

The website allows physically distant observers a chance to participate. In one direction, the site displays live images in real time of the current as it unfolds. In the other direction, users are able to click a simple interface in order to manipulate the scene.

The key aim of interactivity in this performance, as the artist writes, is to create an immediate and understandable form of interaction, so that each click of a user is rightfully perceived as developing the scene further. [15]

In this work we see paradoxically real materiality elements which are part of the telecommunication artwork. The user and participant operate in a real time factual distant reality, like an operator is manipulates with hands of robots in space. The internet
performance of things is linear, it has beginning and end. The result is predictable, but
different in its speed. Naturally, real-time transmission or bandwidth influences the execution
speed of the clicks and the speed of refreshed images on a website where we see tipping
objects.

This discontinuity of internet performance, that it could be defined as an act-and-wait
strategy, is similar with other interactive artworks where the user acts and waits for feedback.
Here we see that the delay between images, which is defined by the transmission speed of the
network, defines the activity of user. The slowness and predictability of the performance gives
the user an opportunity to follow the process, it really fits with internet speed. We can expect
a possible rupture of communication if the speed changes, if it gets faster and the view on the
installation is not refreshed with sufficient speed. The user cannot follow the performance.
Not this one, probably, as it is predictable, but some other event of remote controlling.

In case the user meets a non-predictable installation, each act of the user is defined by changes
of the artwork. The same is happening in real dialogical situations in human communication,
where questions and answers could be random, even the topic could change and new content
could possibly emerge.

5. CONCLUSION

The speed of data transmission defines the delay between acts of communication (which
could be an act of creation and an act of reception) as much as processor speed defines the
execution of algorithms in a computer which allow selecting more complex tasks to realize. It
means that images with higher resolution could be rendered or videos with higher frame rate
could be edited. Higher speed of transmission and short delay in real-time communication
gives the possibility to follow much quicker movement of a distant object and to see a much
higher resolution of images.

Importance of delay in interactive and telecommunication art:

- Delay in traditional communication sequence, between creator, artist and
  receiver/user/viewer is becoming shorter and we see even disappearance of delay in
  this communication act.

- Viewers meeting/encountering visual art, interactive art and telecommunicative art is
time-based performance, which could be divided into reception and feedback
sequences, where delay plays important part. Length of delay influences content of artwork.

- Delay between different elements/sequences of time-based telecommunication art is integral part of the work, like pause is integral part of the musical piece. Time sequences where nothing is happening, where viewer is waiting (for feedback from artwork from local computer or distant server) is becoming part of the time-based interaction between artwork and the viewer/user.

REFERENCES

9. Ibid., p. 103.
10. Ibid., p. 110.
15. Ibid.