

paper



figure

Marikki Hakola

media artist, director, researcher, Kroma Productions Ltd., Magnusborg Studios, Porvoo, Finland
marikki@magnusborg.fi, url <http://www.kiasma.fi/figure>

Abstract

FIGURE is an interactive installation. Spectators are invited to take part in the formation process of the cinematic meaning. The interaction is based on the conversation between the moving body and cinematic elements. Spectators are photographed with the thermal camera. The image of the body is combined together with varying cinematic sequences by means of real-time video trick. The result is projected on the screen in the exhibition space.

FIGURE is part of my research project aiming at a doctoral dissertation at the University of Art and Design in Helsinki. The title of the dissertation is "Hypermontage - a Montage of the Interactive Moving Image", a study at the crossing point of media art and art philosophy in the framework of pragmatism.

According to Charles Sanders Peirce, the human existence occurs in a constant interaction between the human being and the world. Experiencing is cultural action. Philosopher John Dewey says that a work of art is not a separate object from the spectator. Art happens in the process of experiencing art. The art experience is the actual work of art.

I'm arguing that the formation of cinematic meaning is strongly dependent on spectator's interaction with the cinematic elements. I have applied a new concept of montage called hypermontage to express the enlargement of tasks and the character of film montage functioning in the interactive cinema.

Keywords: Pragmatism - Media semiotics, Film theory - Hypermontage

Project URL:
<http://www.kiasma.fi/figure>

FIGURE is also an online work to be seen in the Internet. The Internet audience can watch the real-time stream from a FIGURE installation space and view interactions between spectators and the cinematic elements of the work. The stream is activated and available only when the Installation is exhibited. Meanwhile the web site is serving the FIGURE demonstration video for the spectator.

Project Partners: FIGURE installation is produced by KROMA Productions Ltd, an independent production company for multimedia arts located in the Magnusborg Studios, Finland. FIGURE belongs to the Finland State Art Collection. The first exhibition of the FIGURE took place in the Porthania, Helsinki University, 28.9.-16.11.2000. The exhibition was organized by Kroma Productions Ltd. in collaboration with the State Art Committee, The Contemporary Art Museum Kiasma, Helsinki University and VTT. Production year: 2000.

Credits: Designer, director, producer: Marikki Hakola
technical design, camera, editing: Raimo Uunila
web design: Riku Makkonen
technical installation: Epa Tamminen
technical assistant: Miikkali Korkolainen
production secretary: Jaana Hertell-Amokrane
supporter: Finland State Art Committee, production company: © Kroma Productions Ltd.

FIGURE - Project Description

About FIGURE - thoughts behind the work

FIGURE emphasizes the impact of the spectator's personal history and previous social and cultural experiences on the interpretation. The basis for the cinematic structure in FIGURE is the interaction between the elements produced by the spectator's own body language and the visual elements of the work. The parts of the image collage have an impact on each other's contents, interpretation and in that way on the formation of the cinematic meaning.

FIGURE's user interface is the spectator's body heat. The work is produced by shooting the spectators with a thermal camera, which registers the heat and the movements of the spectator and transforms them into a video signal. The image of the thermal camera is combined by using a real-time video trick with two separate DVD-image collages which include varying cinematic sequences. The images created are projected on the white surface in the exhibition space. The spectator views his/her own image in the reflection as part of the visual world of the work. The spectator's play with the reflected image may start...

Most of the spectators of the work were students of the Helsinki University. I followed their performance and making of their own "natural choreography" with my own PC through the Internet online. People cannot be identified by watching the strongly processed image. However, it seemed that the body language of the spectators changed remarkably, when attending the space several times when she or he already knows the name of the game. I could clearly notice the differences in the body language of the "first attenders" comparing to the "heavy users and hangarounds". The spectators familiar with the work did act in a very conscious way with the work and used their bodies for expressing their feelings or just having fun in an exceptional social situation. After the first surprising experience spectators seemed to start creating their own choreographical patterns related to one's own social and cultural background.

Making a strongly interactive work of art like FIGURE makes me think of the essence of art and the role of an artist. I approach the theme believing that all works of art are interactive in their nature. A work of art needs an audience to exist in culture. In the case of FIGURE the dependence of the work of art on the spectator's experience and action is taken into extreme. FIGURE doesn't simply exist without the spectator's participation, not only by observing the work but also on a very concrete level of physical action. I hope the work provokes thoughts both on the changing character of work of art and the change in the roles of the spectator and the artist.



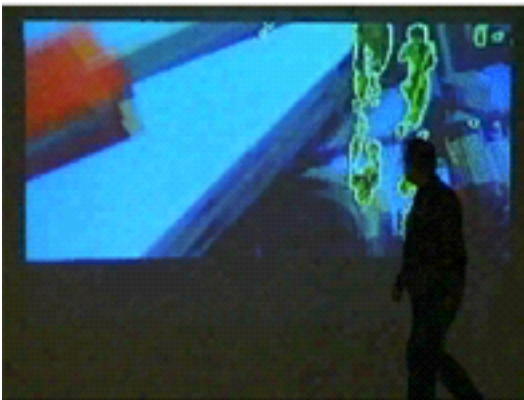
Still images from an online netcast of the interactive installation FIGURE 28.9.-16.11.2000 Porthania, Helsinki.

Aims of Research - Hypermontage

The montage of an interactive moving image

In my research, I study film montage in the special case of interactive moving image and as a creator of cinematic meaning. The development and analysis of new forms of montage enable us to understand the central issue of interactive expression in a broader sense – interactive narration. The issue of new forms of montage expands to a challenge to develop a theory of new interactive and non-linear film narration.

In a book *Film as Art* Rudolf Arnheim introduces principles of montage, which also include the main points of early Russian film makers and theorists Pudovkin and Timoshenko. In linguistic semiology pointed out by Jean Mitry and Christian Metz i.e., montage is defined as organizing individual audiovisual, cinematic elements into a linear unity. Through montage, the individual cinematic elements form together understandable, cinematic language. Montage is regarded as a kind of syntax of film, in which the organization of the audiovisual elements corresponds to sentence analysis or the linguistic code of a natural language.



Photos from the exhibition space of the FIGURE installation in the lobby of the Porthania, Helsinki University, Finland 28.9.-16.11.2001.

These linguistic theories of montage do not, however, extend far enough to cover the new forms of film narration due, on one hand, to the interactivity, on the other, to the non-linearity. Linguistics is an inadequate basis for studying the form of cinema expanding from time-related continuum to time and space-related and active experience. The research that concentrates on the linguistic essence of cinema and

formation of meaning, is not enough to explain the complex cognitive action of interactive cinematic experience. It is not possible to outline the basis and motifs for the concrete action of the spectator, which is essential in understanding the interactive experience according to linguistic semiology.

If the concept of montage is used to describe the formation of cinematic meaning in interactive and the non-linear moving image, the concept of montage must be studied from a new perspective, expanding the concept to cover the problematics brought with the theory of interactivity.

An interactive film may be both linear and non-linear in its presentation form. Even though the cinematic material was organized in a non-linear form for the spectator, the experience of watching is always a linear process in time and space. On the other hand, human experience is always interactive by its nature. I study those forms of the interactive moving image where the existence or action of an audiovisual work of art is dependent upon the spectator's active physical participation, participation that surpasses that generated only on the level of mental experiencing.

The theory of interaction applies not only to the moving image, but to all forms of human expression and communication. The question of interaction is at the same time a larger question of human consciousness. This philosophical point helps us to study and develop the theory of interactivity in a larger cultural context, which is more important considering that different forms of expression are in a strong mutual integration process.

Neither the theory of cinema nor the theory of interactive cinema can be studied solely in the discourse of film theory because it most probably leads to a too limited definition of potential viewpoints regarding its future development.



Pragmatic semiotics

An important support to my process of studies on the field of interactive cinematic narration is given by philosopher Charles S. Peirce. Peirce's work, in my opinion, plays a significant role in developing a theory of interactivity. Peirce's pragmatism, semiotics and epistemological views open new, interesting perspectives on the study, especially regarding the cognitive and semiotic character of interaction and its relationship to the question of consciousness.

I have been studying Peircean pragmatism under the enthusiastic guidance of Peirce-scholar, philosopher Pentti Määttä, whose work is of great significance to my studies. According to Määttä, Peirce's goal was to enlarge the concept of experience by means of action. In Peirce's pragmatism beliefs come from our habits. The human being and the surrounding world are not separate entities from each other, but human existence occurs in a constant interaction between the human being and the world.

Also experiencing is not merely the perception of phenomena in the phenomenological sense, but is cultural action, on both a mental and a physical level. According to Peirce, the boundaries of consciousness are defined not only through perception, but also through action. This presumption is significant and interesting from the viewpoint of interactivity. Peirce's idea about action, as a marker of the boundaries of consciousness, is a fundamental condition for interpretations of information.

From the viewpoint of art theory, Peirce's assumptions mean that a work of art is not only an object of perception and that the experience is not only an inner, psychological reflection, but that experiencing a work of art is a psycho-physical, cognitive activity. Furthermore, experiencing art is not solely a private, relative interpretation of an individual consciousness, but a collective, cultural and social co-experience, where both the artist and the audience are involved.

Peirce's writings have also had a strong influence on those of philosopher John Dewey. In 1934 Dewey published the book *Art as Experience*, in which he extensively studied the essence of work of art from the pragmatist philosophical point of view. According to Dewey, a work of art is not a separate object from the spectator. Dewey thinks that each art has its own medium and that medium is fitted for one kind of communication and language. Dewey asks where art actually happens and claims that art exists not in the object of art. Art is not oil on canvas or notes on a sheet of paper, neither is it light and shadow projections reflected on a white surface. Dewey thinks that art happens in the process of experiencing art.

The conclusion is that the art experience is the actual work of art, and the work of art happens in an interaction between the human being and the object of art. The interpretation of an art experience is ultimately always a process happening within the spectator. There is, however, a great difference between the work of art whose existence requires physical and concrete activity through a human-computer-interface, and the work of art where the spectator's physical performance is not needed.

Hyperformat multimedia works are primarily a result of the user's concrete, physical action. Without this physical experience, the mental experience would not be possible either. An interactive cinema producer has to take into account, besides the mental interaction, also the physical performance and involvement of the spectator.

Hypermontage

Following the ideas of Peirce and Dewey, we can argue that the formation of interactive cinematic expression, and the spectator's interaction with the work, happens in the first instance through montage. Montage is, in a semiotic sense, an essential key to the formation, processing and interpretation of cinematic meaning. The question is, what kind of concept of montage is needed when montage becomes an essential part of a human-computer-interface?

I have applied a new concept of montage, which I call hypermontage, to express the enlargement of tasks and the character of montage functioning in multimedia. Hypermontage is a concept for construction and modeling audiovisuality in a virtual space, and a semiotic interpreter of the cinematic human-computer-interface. Hypermontage is a formation of meaning in a non-linear information context.

Hypermontage works both in time and space. In a non-linear moving image, the content is organized by the means of hypermontage into a kind of action-space. This action-space forms the cinematic architecture of multimedia. It may contain time-based, cinematic elements, as well as other forms of information, such as spatial elements and text. The action-space awaits and allures the spectator into interactivity. The spectator's physical action is a fundamental condition of interaction with the work for establishing the levels of experiencing and interpreting it.

Hypermontage is a tool for producing and processing the cinematic meaning of the moving image in a complex, multi-layered multimedia. The maker of the non-linear moving image is no longer "the master of the universe" of her/his work. And the spectator is not anymore just the one watching or perceiving the work of art. Depending upon the character of the work and the diversity of interaction, the spectator – or interactor – is more or less the co-author or co-maker of the work. This does not mean that the responsibility of the artist is diminished. It means rather that the artist's role, tasks and challenges are changing radically from those of the individual thinker or "art transmitter" to those of one elaborating the levels for participation in a social experience of art.



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