Synthesis of Modern Types of Media Arts and Stages of Metamorphosis of a Multimedia Product

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Abstract

The synthesis of media arts gives a modern person great opportunities for translating his most incredible ideas and intentions into real projects, which gives us the opportunity to cognize not only our reality but also other worlds created in virtual space. This, in turn, causes the appearance of metamorphosis – the transformation of a product from one type of art to another, which provides people with new experience of knowing this product at the level of visual, tactile, auditory and psychological perception.

Currently, one can observe a tendency towards the synthesis of all arts, the unification of directions, the mixing of styles and techniques for the execution of the concept of projects, creations and the tendency of metamorphosis of relevant, demanded and competitive product of media art or art – the transition of a product from one type of art to another. As a result of the study, a closed three-staged scheme of product metamorphosis was revealed: "printed edition – film adaptation – multimedia product" in material perception and "comprehension – sensation – interaction / cognition" in sensory perception. The principle of the development of the project during the metamorphosis was revealed, presented in a linear scheme: idea – development of an idea – addition / rethinking. Four schemes obtained in the course of the research were combined into a single scheme of metamorphosis of the media art product and its idea.

It can be concluded that all three stages of metamorphosis are those ideas and achievements of art that a person of the 21st century wants to know, comprehend and feel due to people lacking single reality to satisfy all their sensory and emotional needs.

Keywords: multimedia, multimedia product, metamorphosis, art, synthesis, synthesis of arts, evolution of multimedia.

1. Introduction

Our modern realities have a strong difference from the realities of previous eras, which can be traced in culture, science and other aspects of our life. Art, as the main emotional and spiritual tool for understanding the world, is most susceptible to these changes, and more than that, capable of reflecting, reworking and multiplying them.

If in previous epochs within one century particular kinds of creative activity and trends in art had being developed and in the next century they were replaced by others, now it is possible to reveal a tendency for the synthesis of all arts, the unification of trends, mixing of styles and techniques for the execution of ideas of projects, works, etc. According to Wikipedia, "*the synthesis of arts is an organic combination of different arts or types of art into a single artistic whole, which aesthetically organizes the material and spiritual environment of a person's existence and implies the creation of a qualitatively new artistic phenomenon that cannot be reduced to the sum of its constituent components.*"

2. Materials and methods

Using the historicism method, a systemic approach was used to conduct content analysis of a sample of five projects that had great commercial success, as well as a sample of four additional projects. These are such multimedia products as a series of books, films and computer games about Harry Potter by J. Rowling; a series of books, films, and computer games about the universe by J.R.R. Tolkien *The Lord of the Rings* and the *Hobbit*; a series of books, films, TV series and computer games based on the saga of A. Sapkovsky *The Witcher*; the series of comics and films of the *Major Grom* project and the Marvel Studio projects; films and computer games *Mortal Combat, World of Warcraft*; series of films and TV *series Star Trek*. Information about the projects is borrowed from Internet resources, such as Wikipedia as the most responsive media.

In this way, 26 sold products were considered, which may indicate the representativeness of the sample. The systematic analysis of these projects made it possible to refine the scheme of the development stages of the multimedia product metamorphosis and to change its structure. Based on the induction method, it was assumed that the projects that do not fit into the resulting scheme are at the stage of its implementation. Using the method of analogies, the proposed scheme was compared with psychological and other schemes.

3. Discussion

Currently, there are works and studies, the authors of which have tried to consider the relationship between the creation of a printed product, films and games based on its plot, as well as the synthesis and development of the arts. However, these studies do not provide diagrams of the relationship between the development of multimedia products, which could be used for the development of specific multimedia product, and also, their global development (that is, all over the world) was not revealed. In addition, no studies have yet been identified where all the functions of multimedia products (their impact from physical and psychological point of view) would be combined with the development of these products within a single project.

In the work of J. Höglund and M. Willander, an attempt is made to reveal the differences in the stories told by such projects as Mark Bowden's documentary *Black Hawk Down: A Story of Modern War*, Ridley Scott's major Hollywood film *Black Hawk Down* and the computer game *Delta Force : Black Hawk Down* (Höglund, Willander, 2017). The authors note that the computer game owes its release to the success of Ridley Scott's film and thereby reveals the first interconnection. However, the authors believe that the tools developed by adaptation research (commonly used to study the transfer of narratives from one form of multimedia to another) are insufficient to fully describe the ways in which these narratives change between iterations. In this case, the political climate of region, the expectations of various audiences and industries have a greater impact on the development of media products. Accordingly, the development of media products went its own way in each country and at different times (Höglund, Willander, 2017). Yet another work agrees that time, history and the development of society are important. For example, new technologies today are affecting movies, music, books and games. Moreover, instant access constantly changes viewers' habits and influences our culture (Dixon, 2013).

There are also works where the synthesis of media products is observed. Researchers have found that some games are directly presented as an art form that can be equated with interactive movie games, music games, and more. This provides the greatest success for media games (Wang et al., 2019). The same idea is mentioned in the study of multisensory books. The emphasis is on two things: getting emotional states from users and creating multi-sensory media effects. Using Media Product Tools Can Improve "Human perception and affective computation can be used to capture people's affective states while reading" (Kreitlon, et al., 2019). The work also mentions the synthesis of media products and explores the "grammar of narration in virtual reality". The authors

explain that it is closely related to "video game grammar". But in the study, they focused on the differences between these media products and came to the conclusion that there is no clear structure of products or patterns of their synthesis.

In search of new types and methods for the development of the media industry people are trying to find new forms of illustration and ways of storytelling. Game researchers believe that interactive films today should be seen as a new form of image expression that resulted due to new thinking in film and television and real-time rendering technology, thus, films should not be limited to conventional video games or 3D animation (Fang, et al., 2020). In this case, the authors perceive the technical aspects as tools or methods, rather than films and books of the same project.

A number of studies investigate at what age people are interested in watching TV programs and films, book reading and computer games as well as what effect they have on mentally passive and mentally active sedentary behavior of people, psychological stress and organized sports participation. For example, in the work of A.O. Werneck et al hypothesized that "psycho-passive sedentary behavior during adolescence was associated with increased psychological stress in adulthood, and this association was mediated by television viewing and self-reported health in adulthood" (Werneck, et al., 2021).

Another interesting study shows the attitude of young people towards media products, and it contains statistics about how many hours young people use them. This means that "the impact of media products depends on age, gender, race / ethnicity and the socioeconomic level of the family". There are examples to explain this: television remains the most popular medium for transmitting information, but about half of the young people surveyed use a computer on a daily basis (Roberts, 2000). The authors pay attention to the age of people and their interests, but they do not mention how this affects the development of multimedia products.

No less interesting is the research of the relationship between people and the media products they use. The study participants were presented with a narrative text, a movie fragment and a computer game. As a result, a connection was found between the fictional world, spatial presence and pleasure, which are assessed in various types of media. One type is that the features of the images did not significantly affect the effect of presence and pleasure in a computer game (Weibel et al., 2011). However, the dynamics of the process and the history of specific media products have not become the object of research in this work.

A number of researchers describe only one part of the media product. For example, "Writing Deep Games: Making Games with Meaning and Purpose" for the gaming industry states that "video games undergo dynamic changes in their content and perception". The author tries to highlight the conditions that make the games deeper. In his opinion, it depends on complex abstract concepts, internal processes and emotions through certain means of the environment. And it helps to understand how to make the multifaceted aspects of human existence tangible through the gameplay, but it does not take into account the experience that people get from other media products (Rusch, 2017).

4. Results

General globalization has a great influence on the synthesis of arts – a phenomenon when the world, as a result of the exchange of goods and products, information and knowledge, as well as cultural values, becomes more interconnected, and the development of digital technologies and the emergence of new opportunities for the development of areas of media art take place. The concept of media art means all types of screen arts, computer graphics and animation, VR and AR products of reality and biotechnology, with the help of which a person obtains visual and, in some cases, tactile experience of knowledge. That is, media art is a kind of art, the works of which are created and presented using modern information and communication technologies (Mikheev, 2018).

The synthesis of media arts gives a modern person great opportunities for translating his most incredible ideas and intentions into real projects, and this, in turn, gives us the opportunity to feel our being in another dimension or reality, to get a new emotional and sensory experience, which was inaccessible to previous generations.

If we recall the works that were created in the era before the Silver Age, then we can conclude that at the end of the creation process the author received self-sufficient work that does not require and does not imply revision or processing. It was not used by society for any other purpose, except for the one that the author laid down in the work, and, one might say, was considered in the same plane. For example, pictures were painted to be seen by people. The sculptures were carved from

stone for the same purpose. After the Silver Age, namely with the development of the industrial society, the works of previous eras supplemented the advertising content, and with their help other products began to be known but not the works themselves. Now the works, that were written many centuries ago, and sculptures come to life on the walls of virtual museums, which everyone can "walk" through without even leaving home. For example, the National Gallery of Washington (USA) or the Solo-Mona-Guggenheim Museum in New York (USA) allow you to take virtual tours of your gallery. If you look at the work Young Priestess, created in 1902 by the French artist William-Adolphe Bouguereau, through a smartphone, you can see the work of digital three-dimensional graphics artists - the picture comes to life before our eyes. American Mac Cowley, who is engaged in game development, transferred Van Gogh's painting *Night Cafe* into a virtual space, in which viewers have the opportunity not only to watch what is happening, but also to take part in the life of the painting – walking around the painted cafe using controllers. In this way, the range of perception of static works and the ways of interacting with them have expanded. Now we can comprehend a work of art not only from the outside, with the help of a glance, but also from the inside, with the help of actions.

This technology is used not only to supplement existing products. Many contemporary artists go beyond our reality, combining digital drawing, video content, sound design, 3D graphics or AR installations in their work. For example, Australian artist Stuart Campbell creates a three-dimensional world from his paintings, artist Kevin Mack creates colorful compositions in the direction of abstract art *The Mysterious Mystery* of *The Mystery of The Mysterious*, artist Yang Cheng works on "living simulations" in which he tries to create characters that will behave like real living beings with their own needs and desires.

Mixing of various performance techniques in one piece of art is also actively developing. In screen art, the animated film *Spider-Man: Through the Universes* is a prime example. The cartoon takes place in the multiverse of Spider-Man. The authors of this cartoon combined various types of graphics (3D animation, 2D animation of various styles (based on comics)) in order to work out each of the realities touched upon in the project in its own way, in its own color scheme, with its own character of lines and shaping. After the release of this animated picture, many copyright videos and cartoons, comics and fan art began to combine various types of images in order to diversify "their world" or to supplement one reality with another. In this way, a certain graphic language began to determine the specific reality of the virtual world.

Another phenomenon can be observed in the formation of the new art of the 21st century, when the main synthesis of arts for the development of a specific product occurs only at the emotional-sensory level of perception, while the product itself or the project moves from one type of art to another, taking various forms. providing people with new experience for the knowledge of this product at the level of visual and psychological perception.

This phenomenon can be called the phenomenon of metamorphosis. Metamorphosis means the transformation or recreation of something. In art, this can mean the transition of a product from one type of art to another. The most striking example of metamorphosis in contemporary art is the evolution of the printed work. A book, a picture book or a comic strip is read by a large audience. If a book or comic strip interests readers, they want not only to get the continuation of the story but to see and hear it – this is how the need for a film adaptation of the work appears. After animated pictures or films become released, while the public continues to expect the development of the project, a computer game is being developed and in the last five years – VR games with the use of ideas, stylistics and graphic language of films.

In this way, we can assume the existence of the following linear chain of events, along which the metamorphosis of an object with a certain type of art develops (Figure 1): "comic / book – film – game" or "printed edition – film adaptation – multimedia product".
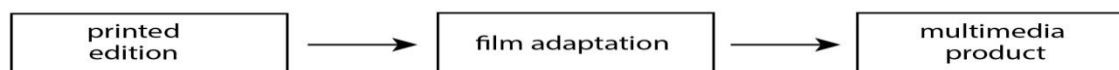
Fig. 1. Stages of product metamorphosis

In order to test this scheme, we can consider as examples such famous projects as the series of books and films about Harry Potter and the Witcher since these works have gone through all

three stages of metamorphosis given in the same scheme. The Harry Potter series was written by J. Rowling and tells the story of an orphan boy who finds out that he is a wizard. Together with friends for several years he studied at the *Hogwarts School of Witchcraft and Wizardry*, uncovering secrets and mysteries from the past, overcoming difficulties and trials, and preparing to meet the darkest wizard of all time. The saga *The Witcher* of Andrzej Sapkowski tells about the life of the witcher Herald and his Destiny – the witcher Ciri. The plot takes place in a different reality based on the era of the Middle Ages and Slavic mythology. The rivalry of kingdoms, the brotherhood of witches, new races and the duty that must be fulfilled – this is how this work can be described.

The Witcher books were published from 1993 to 1998. The saga includes the following works: *The Last Wish* (1993) (originally titled *The Witcher* in 1986), *Sword of Destiny* (1992), *Blood of the Elves* (1994), *Hour of Contempt* (1995), *Baptism by Fire* (1996), *Tower of the Swallow* (1997), *Lady of the Lake* (1998) (hereinafter, dates and names are given based on corresponding articles published on Wikipedia). The release of *The Witcher*, the first adventure, RPG and action game based on the *Witcher saga*, was released on October 24, 2007. The release of the last and most popular part of the *Witcher series* of games, *The Witcher 3: Wild Hunt*, was released on May 18, 2015. In 2002, *The Witcher series* was filmed by director Marek Brodsky, and in 2019 *The Witcher* game series from Netflix was presented to the general public. Thus, it can be seen that the example fully supports the theory of the scheme of metamorphosis.

The first book about Harry Potter *Harry Potter and the Sorcerer's Stone* was released on June 26, 1997. The date of its adaptation is November 16, 2001. In the same year, a computer game in the quest genre, arcade and role-playing game for PC, PS, GBA was released , GBC, and in 2003 it was developed for platforms such as GC, Xbox, PS2. It is worth noting that the gameplay of the game is presented in the form of arcade with a third-person view, which combines elements of an adventure game. The premiere of the second film *Harry Potter and the Chamber of Secrets took* place on November 3, 2002 in London (UK). The book was published four years earlier – in 1998. And the computer game was released on November 5, 2002. *The Harry Potter and the Prisoner of Azkaban* book (third part) was published on July 8, 1999 in the UK by Bloomsbury. The film of the same name was first released in the United States on May 23, 2004. The computer game was released on June 4, 2004. It can be seen that movies and games developed at the same time, and, upon a detailed study of the game design, it can be assumed that game was developed based on the design of films, according to which they were issued. It follows from this that the visual series of the film adaptations from books was dominant in the process of the graphic development of the Harry Potter Universe. This analogy can also be traced in the following parts of the films and games about Harry Potter, so, it is worth considering only the release dates of the books and their adaptations. The fourth part of the series of books (*Harry Potter and the Goblet of Fire*) was released in 2000, the film adaptation – 2005 The fifth part *Harry Potter and the Order of the Phoenix*: book – 2003, the film – 2007. The sixth book called *Harry Potter and the Half-Blood Prince* was presented to the public in 2005, its film adaptation – in 2009.And the film adaptations of the seventh and eighth parts of *Harry Potter and the Deathly Hallows* were released in 2010 and 2011, while the book was written in 2007 (Salikova, 2013). It can be concluded that all the novels in the series also went through three stages of the product metamorphosis scheme, but this scheme is not linear.

In addition, there are other projects that at the moment cannot illustrate the theory deduced. For example, some of them are *Marvel* comics, which created a whole universe of films but not popular computer games, *Mortal Combat*, a series of fighting video games, created by Ed Boone and John Tobias, *World of Warcraft,* a massive multiplayer online role-playing game, developed and published by Blizzard Entertainment, for which feature-length films were shot yet large editions of comics or other book editions were not developed.

It turns out that at the moment not all products have passed all three stages of evolution, given above, and not all stages were observed in the indicated sequence (Figure 1). Nevertheless, it can be assumed that all these three stages will be observed in future if the product continues to be competitive and in demand.

As an example of complementing missed stages in the evolution of the metamorphosis of products over a long period of time, we can consider the comic strip *Major Grom* and the trilogy of films *The Lord of the Rings* and *The Hobbit*.

Major Grom is a comic strip of Russian publishing house Bubble Comics which tells a story about principled, stubborn, strong and intelligent police major Igor Grom, published from October 8, 2012 to December 24, 2016 (8 years old). Thanks to the hard work of screenwriter Artemy Gabrelyanov (with co-authorship with Evgeny Fedotov and Ivan Skorokhod), artists Konstantin Tarasov and Anastasia Kim, the comic has gained great popularity among Russian readers.

The trilogy of films *The Lord of the Rings* and *The Hobbit* should be considered separately. The first film *The Lord of the Rings: The Fellowship of the Ring* was released in 2001, *The Lord of the Rings: The Two Towers* (part 2) – in 2002, *The Lord of the Rings: The Return of the King* (part 3) – in 2003 The Lord of the Rings book, one of the most famous and popular books of the XX century, was started by J.R.R. Tolkien in 1937. The three parts into, which the book was divided and which were subsequently filmed by director Peter Jackson, were published in England on July 29, 1954 , November 11, 1954 and October 20, 1955. A lot of time passed after the filming of *The Lord of the Rings* trilogy before the fans of the project could see the continuation of the development of J. Tolkien's universe in the form of *The Lord of the Rings* computer game (2009) and *The Hobbit* film trilogy (2012-2014). Even a few years after the release of *The Hobbit: The Battle of the Five Armies*, global interest in J. Tolkien's universe remains great. The audience also wants to be able to interact with the world of Middle-earth and its inhabitants, just as they did with the box office of the very first film which caused phenomenal success. This is due to the release of computer game based on the movie *The Lord of the Rings* – *The Lord of the Rings: Gollum*, which is scheduled for release in 2021 (Kinowar.com).

In this way, the demanded product actually undergoes all three stages of metamorphosis, but the given sequence of stages is not always observed. It turns out that the above circuit is not linear but closed (Figure 2).

Based on these data, the question may arise – why exactly such stages of product evolution are formed. For this, the scheme of product metamorphosis development should be translated into other concepts: comprehension – sensation – interaction/cognition (Figure 3).
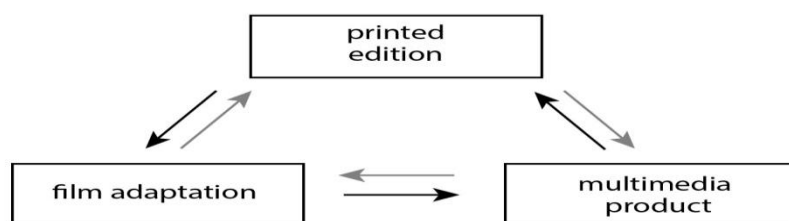
Fig. 2. Stages of product metamorphosis. Scheme 2

Fig. 2. Stages of product metamorphosis. Scheme 2.1

Let's compare the two resulting circuits (Figure 2 and Figure 3).

Print edition – conceptualization. The reader rarely feels lonely, he understands the world and the people around him better (Khanukaeva, 2018). Scientists have proven that during reading activity, when a person associates himself with a hero, those areas in the brain that are not involved at other times begin to function. This effect does not occur when interacting with TV or computer games since they include developed ready-made images and visual solutions for a person that do not require the use of the viewer's imagination (Secret..., 2020). This means that a person's interaction with a book takes place at a completely different level of perception, and the person's idea of an artistic or graphic work differs from the finished representation that media art offers.

An animated film or a feature film is a sensation. Animation enhances and enriches the user or viewer experience. Observing the transition from state to state, a human analyzes the context of what is happening (Zholudova, 2020). It turns out that when watching a movie, a person's consciousness forms an imitation of experience based on the events of the film experienced together with the heroes. At the same time, a human cannot influence the plot. This experience is

not complete because the human does not have direct interaction with the viewed story, since he cannot influence the development of the plot's actions.

A computer game or a video game can form an adequate response to uncertainty (Belyaeva, 2016). The point is that it is responsible for human interaction with the product and its cognition through visual, tactile, sound and emotional perception. The process of interacting with a computer game differs from the process of interacting with a motion picture in such a way that during a game an individual forms his own decisions and tasks, he is not devoid of choice and is able to influence the development of the plot. However, a game player is deprived of the opportunity to supplement graphic images and to apply his imagination in relation to them and the characters encountered throughout the game.

With the help of a book a person comprehends plot, events and problems through the prism of his own perception of the product, a movie helps him to feel the emotional background of work and analyze it, and a computer game is a process during which a person not only expands knowledge about the Universe of the project, but has the opportunity to interact with it, to live it. When all three stages of metamorphosis have been passed in the development of the product, and the result of each stage has been tested by a person, then within this person there is a synthesis of feelings caused by the experience of each of the stages. These senses, together with visual and tactile experience, create a shared cognition of the product universe, created by the art authors.

From this the following principle of project development during metamorphosis can be derived, presented in a linear diagram (Fig. 4): idea – idea development – addition/rethinking.


Fig. 4. The principle of project development during metamorphosis

This idea sounds in an interview with Tomasz Bagiński, director of the above example – *The Witcher*. The director says that although the game immerses us in the world created in the saga, it interprets these novels in a very different way, and that he expects that, unlike the game, the studio will work on this material "a little otherwise, closer to the literary source "(Interview..., 2917).

Another example can be considered – on September 8, 1966, the first *Star Trek* series (Star Trek) was released. In 1973, an animated series was released on this topic. Also in 2001, *the series Enterprise* was released, expanding the Universe of the project. After the idea was developed in the subsequent continuation of this series – 13 films. The last of them are dedicated to the alternate reality created in the *Star Trek trilogy*, the release dates of which are 2009 *(Star Trek 11)*, 2013 *(Star Trek: Retribution)*, 2016 *(Star Trek: Infinity)*. Based on the above diagram showing the stages of the metamorphosis of a multimedia product, it can be concluded that in future, given the relevance of the topics of space exploration, heroic deeds and other aspects covered in the film, as well as the continuing public interest in the characters and the history of the franchise (which should be supported by development of the idea on the market), we can expect the release of a game based on this work. Current relevance of these topics is confirmed by growing popularity of the computer game Eve online – a massive multiplayer online game with a sci-fi storyline, where action occurs in space, where the player acts as the captain of a spaceship. In this way, we see the evolution of idea, its rethinking and addition.

You can combine the data obtained during the study into a single scheme (Figure 5). Since the chain of metamorphosis is closed, it will take the "print" stage as the starting point – the first stage of product development.
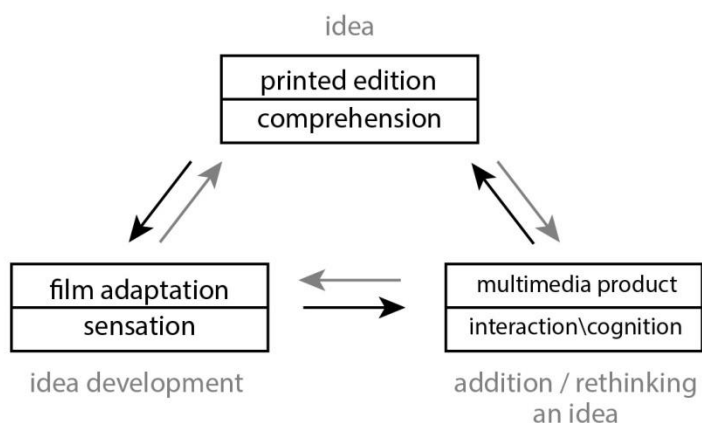
Fig. 5. Combined circuits. The starting point is the first stage of metamorphosis – the print edition. Scheme of the metamorphosis of the product of art and its idea

It can be concluded that all three stages of metamorphosis are going through those ideas and achievements of art that a human of the 21st century wants to know, comprehend and feel. It is no coincidence that multimedia arts are developing at an incredible speed, constantly expanding their capabilities and ways to achieve maximum impact on the user/viewer. It is worth noting that another trend in art comes from here – the recreation of reality using 3D in AR and VR technologies.

People lack one reality to satisfy all their sensory and emotional needs, and therefore the synthesis of arts and metamorphosis of multimedia projects are gradually transferred to an exclusively virtual space, enriched with new graphic techniques and tools. This also determines the choice of works of various types of media arts, which continue to develop, while going through the stages of product metamorphosis. Such works as *Harry Potter*, *The Lord of the Rings*, *The Witcher*, *Mortal Combat*, *World of Warcraft*, etc., the interest in which not only does not disappear but keeps growing – all these are works of fantasy genre, in the reality of which there is something that cannot be in our world – magic, magical creatures and nature, races of intelligent beings unknown to people, absence of restrictions in the capabilities of heroes, everything that pleases, delights and surprises a modern human. And it is paradoxical that everything that a human lacks in the modern world of technology is replenished with the latest technical developments and digital art.

5. Conclusion
The scheme obtained in the course of this study can be applied to the development of a specific product, based on the set goal, namely, from determining the value of the product for society and the sphere of its influence on human perception.

Currently, one can observe tendency towards the synthesis of all arts, the unification of directions, the mixing of styles and techniques for the execution of the concept of projects, works and the tendency of metamorphosis of an actual, demanded and competitive product of media art or art – the transition of a product from one type of art to another. As a result of the study, a three-stage closed scheme of product metamorphosis was revealed: "printed edition – film adaptation – multimedia product" in material perception and "comprehension – sensation – interaction/cognition" in sensory perception. The principle of the project development during the metamorphosis was revealed, presented in a linear scheme: idea – development of an idea – addition / rethinking. Four schemes obtained in the course of the research were combined into a single scheme of the metamorphosis of the media art product and its idea.

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