

УДК 811.111:791

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History of cinematography

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Cinematography is the art and technology of motion-picture photography. It involves such techniques as the general composition of a scene; the lighting of the set or location; the choice of cameras, lenses, filters, and film stock; and the integration of any special effects. All these concerns may involve a sizable crew on a feature film, headed by a person variously known as the cinematographer, first cameraman, lighting cameraman, or director of photography, whose responsibility is to achieve the photographic images and effects desired by the director [1].

History of cinematography begins in the end of 19th century. Some facts of cinematography are obvious for our minds but for pioneers of cinematography they weren't. There were a lot of attempts of creation objects in motion.

The original inventors of cinematography were Lumiere brothers. The first public demonstration was performed in Paris in March 1895. But the real birthday is considered to be in 28th December 1895, when the first commercial presentation took place in the Grand Cafe on the Boulevard of Capucines.

Several very short films were demonstrated during the sessions of brothers Lumiere's movies. First of them was "Workers Leaving the Lumière Factory". But the most popular of them was "Arrival of a Train". Movement of train on the screen was realistic that's why viewers were excited. There was no cinema after the invention of Lumieres yet. The pioneers who created the system of recording and image

playback, did not foresee all the possibilities of using cinema. Lumieres believed that the main function of their invention is recording and storing the newsreel for posterity. Others saw just funny entertainment in the demonstration of moving pictures. However, cinema was quickly gaining popularity [2].

Soon, George Melies, the head of Paris theater, was interested in cinematography. He was the first one who estimated the possibility of cinematography when he saw it and who started making movies by the scenario, using a lot of specific tricks and effects. In the end he made cinematography as kind of art. One of the most popular movies of Melies is "The trip to the Moon" (1902) [3].

In 1910 almost 70% of films were created in France. However other countries such as USA, Great Britain and Germany also contributed to the development of world cinematography. At the beginning of century usual duration of the movies was 15 minutes. In 1910 a lot of movies with duration about an hour appeared. In 1915 an American citizen Griffith made a film called "The Birth of Nation".

Until 1927 almost all the films were "dumb", they contained only a picture with no sound. The first company which decided to experiment was the American company "Warner Brothers". The first film where a character talks on the screen "the Jazz Singer" was released in 1927.

The arrival of sound to the movies reduced the role of the techniques of artistic expression which was primarily designed just to compensate for the lack of sound. Sound was pushing for a more realistic, having a clear narrative plot and less conditioned cinema. Some well-known directors and actors (including Charlie Chaplin) opposed to talkie or wanted the sound films not to interfere with their visual experiments, but the sound quickly earned a place in the film, and throughout the 30's almost all the films have become sound.

The introduction of color in the cinema was slower than introduction of sound. Technical possibility of creation color film appeared in the 30s, and one of the first color films, earned huge popularity. Before 1932, when three-strip Technicolor was introduced, commercialized subtractive processes used only two color components and could reproduce only a limited range of color [3].

“Gone with the wind” which was made in USA in 1939 was one of the most popular first color movies.

In the late 1980s, Sony began marketing the concept of "electronic cinematography," using its professional video cameras. The effort met with very little success. In 1998, with the introduction of HDCAM recorders and digital professional video cameras with huge resolution based on CCD technology, the idea, began to gain traction in the market [4].

In May 1999 George Lucas challenged the supremacy of the movie-making medium of film for the first time by including footage filmed with high-definition digital cameras in Star Wars: Episode I – The Phantom Menace.

One of the most advanced films in terms of total computer graphics use was the film "The Matrix", and computer effects provided the film with a huge success. Computer graphics set new standards of realism and entertainment movies.

References

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