

Two-Color Kodachrome Test Shots No. III

By James Layton

The descriptively-titled “Two-Color Kodachrome Test Shots No. III” (1922) is a short film that for the better part of 87 years remained unseen by the general public. Its discovery by modern audiences has brought praise, wonder and interest in the film and the little-known early Kodachrome process it was shot in. But what is the story behind the making of this footage? And why has it been recognized on the National Film Registry?

When it opened its doors on Labor Day weekend in 1922, the spectacular Eastman Theatre in Rochester, New York featured a number of special attractions. The unveiling was a grand affair, with dignitaries and business leaders from up and down the country attending, as well as a host of celebrities. The 3,352-seat \$3-million theater—originally envisaged for film screenings, orchestral performances, and regular opera stagings—was entirely bankrolled by George Eastman, founder of the Eastman Kodak Company, the world’s leading film manufacturer. The opening night film was supported by a host of film and stage attractions, among them an exclusive: the “first presentation on any screen of the Eastman Kodachrome process.” The remarkable color footage that was shown that night, and for the following seven weeks, included “intimate close-ups of famous film stars, taken in Hollywood and elsewhere” (*Rochester Democrat & Chronicle*, August 27, 1922). The high-profile showcase for Kodak’s latest technical advancement was an expensive but effective platform to launch what Kodak hoped would revolutionize the film industry.

The original Eastman Kodachrome process—not to be confused with the more commonly-known Kodachrome process for 16mm and slide film—was a subtractive natural color system, utilizing red and green component colors to reproduce a limited part of the spectrum. Its origins dated back to 1913, when its primary inventor John G. Capstaff first developed the process for still photography. By 1917 the Kodak Research Laboratories had perfected the process enough for motion picture use, but its further development was halted by the United States’ entry into the First World War. Capstaff’s Kodachrome was expensive and complicated, and involved a lot of trial and error to get the best results. Making prints required an artisanal approach that worked best on a



A frame enlargement shows Mae Murray in lifelike Kodachrome color. Courtesy George Eastman House.

small scale in the research laboratory, but produced beautiful, subtle images when done well. The use of red and green as the component colors meant flesh tones were rendered with life-like realism (making the process particularly well-suited to portraiture), although other colors such as blue and purple were impossible to achieve.

The first experimental Kodachrome cameras used two lenses—one above the other—to capture each color record onto black and white negative film. This created the problem of spatial parallax which could be partially corrected in printing (colored borders or fringing appeared around the edges of subjects when the color records were not properly aligned). Making the prints involved copying each color record onto a special “duplitzed” film with emulsions on both sides, then dyeing the respective emulsion either red or green.

By 1922 Kodak was ready to present the Kodachrome process to the press and public for the first time. With the assistance of Jules Brulatour, George Eastman’s friend and staunch business ally, a series of “test shots” were taken of stage and screen stars at the Paragon Studios in Fort Lee, New Jersey, and at the Famous Players-Lasky Studio in Hollywood. Among those known to be photographed were Agnes Ayres, Guy Bates Post, Virginia Brown Faire, Wanda Hawley, Gloria Swanson, Alice Calhoun, Mary Eaton, Mae Murray, May McAvoy, Claire Windsor, Mabel Palmer, Constance Binney, Shirley Mason, Lois Wilson, Mildred June, Lila Lee, Billie Dove, and Hope Hampton (who would soon become Jules Brulatour’s wife). The shots were simple; the stars were photographed under flat lighting in front of a black background, and largely in medium shot or close-up. The

exquisite photography emphasized the performers' natural beauty and carefully-chosen costumes. Blonde and red haired subjects appeared the most radiant, while pale, porcelain-like complexions were rendered almost ethereal. The black backdrops effectively concealed the process's greatest technical flaw: the presence of color fringing around subjects in different focal planes. The shots would showcase the new Kodachrome process, but would also be used to provide exclusive content during the Eastman Theatre's opening weeks. (In fact Jesse Lasky only agreed to the filming of Famous Players-Lasky stars under the proviso that the footage would be limited to screenings at this one theater.)

The local press exclaimed that Kodachrome represented "the highest stage the art has reached to date" (*Rochester Herald*, September 4, 1922); but as beautiful as the results were, the new color process had little impact on the film industry. The Eastman Theatre footage was not widely seen outside of Rochester and the process was only used on a limited scale through 1928. "The Light in the Dark" (1922) included a medieval-set flashback with select shots in Kodachrome, and Jules Brulatour sponsored eight "McCall's Colour Fashion News" shorts featuring his wife Hope Hampton wearing the latest Paris modes (1925-1928). At the close of the decade, a failed attempt was made by the Fox Film Corporation to use Kodachrome as an alternative to the dominant Technicolor process, but despite huge investment from the studio, it never reached the public. The first Kodachrome process quietly vanished.

"Two-Color Kodachrome Test Shots No. III" is one of thirty reels of early Kodachrome films at George Eastman House. It was donated to the museum in the 1950s along with Kodak's collection of historical films and other tests. The film is a stunning example of the Kodachrome process at its best. It is particularly fascinating as it appears to be outtakes; its subjects try out different poses throughout and sometimes stop to talk to the people behind the camera—they are at times relaxed and at ease. The reel features Hope Hampton (in costume from "The Light in

the Dark"), Ziegfeld Follies star Mary Eaton, an unidentified model and child, and movie actress Mae Murray (pouting for the camera as she does best). Correspondence in the George Eastman Legacy Collection at George Eastman House reveals the shots were taken between January and May 1922 at Brulatour's Paragon Studios. Both Hampton and Murray had problems with the heat and intensity of the bright incandescent lighting. Brulatour reported to Eastman that because of the lights shining in her face, Hampton couldn't "hold an expression of the eyes very long, and is forced to blink." After several days of this, Hampton had to visit the doctor to see if there was any permanent damage done to her sight.

The film was preserved by George Eastman House in 2009. The laboratory work was undertaken by Haghefilm Conservation Bv. in Amsterdam, and the project was overseen by L. Jeffrey Selznick School of Film Preservation graduate and Haghefilm Fellowship recipient Sabrina Negri. In March 2010, the reel of outtakes was posted on Kodak's *A Thousand Words* blog. Shortly after, the film became an archival sensation, going "viral" and receiving over 842,000 hits on youtube to date. The video has been re-blogged, shared, and written about by hundreds of sites and the reach has been spectacular. It has penetrated well beyond the specialist silent film audience. The footage has been truly eye-opening to many, who were not aware of such early color moving images. "Two-Color Kodachrome Test Shots No. III" is not the first color footage, as some have thought, but it is one of the very best examples from this time. The color is clear and lifelike, and draws the viewer into the past as if it were yesterday.

The views expressed in these essays are those of the author and do not necessarily represent the views of the Library of Congress.

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