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Gary Adams Beverly Graham Kristina Kersels Laura Rooney William John Kennedy and the Kiwi Arts Group The Lucas Theater Staff

The Reel Thing is made possible by the active and engaged support of some of the most important and innovative companies in the archival field. These firms work side by side with archivists and asset managers to constantly raise the standard of preservation and restoration, and to find new ways to insure that moving images from public collections and the private sector will retain their quality and remain accessible as a resource for future generations. We offer our gratitude for their indispensable sponsorship of AMIA and The Reel Thing.

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THE REEL THING XXXIV

The Lucas Theater, Savannah, Georgia – AMIA 2012 12:30pm – 5:30pm - Wednesday, October 8, 2014

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Welcome Grover Crisp

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"A New Look at an Old Sneeze:" Kinetoscopic Records as Paper, Digital, and Film Dan Streible, New York University

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Digital Warhol

Greg Pierce, Warhol Museum, Katie Trainor and Peter Oleksik, MoMA; Justin Brukman, Chris Vincze, MPC

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Restoration of *Stormy Weather* (1943) John Polito, Audio Mechanics

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Reanimation of *Eadweard Muybridge, Zoopraxinographer* Ross Lipman, UCLA Film and Television Archive

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Restoration of Defective Pixels in Digital Camera Sensors Kevin Manbeck, MTI

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Rebuilding, Restoring and Preserving the International Olympic Committee's Official Film Collection

Adrian Wood, Restoration Producer for the IOC

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Too Much Johnson and Film Restoration in the 21st Century Janice Allen, Cinema Arts

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REEL THING XXXIV

PROGRAM

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Welcome Grover Crisp

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"A New Look at an Old Sneeze:" Kinetoscopic Records as Paper, Digital, and Film Dan Streible, New York University

The images copyrighted as a photograph by W.K.L. Dickson as Edison *Kinetoscopic Record of a Sneeze*, January 7, 1894, have been well circulated for 120 years, yet no motion picture version was seen until 1953. Although this single-shot movie, commonly called *Fred Ott's Sneeze*, became an icon of early cinema, no complete moving-image edition of the 81 frames recorded at the Edison lab existed until this past year, when the Library of Congress made a digital version and a new 35mm print in 2014. This presentation reveals how *Fred Ott's Sneeze* became familiar in its short form, while its longer version was almost completely overlooked until now.

The explanation involves two parts. First is a narrative of how these kinetoscopic frames recording a man sneezing migrated into several material forms: from the earliest 35mm motion-picture film to photographic papers to reproductions in the print press; then from still photographs to 16mm film before later appearing in video formats and the Web; and finally to digital scans of paper copied on 35mm film. Second is a companion account of how *Edison Kinetoscopic Record of a Sneeze*, continually accumulated "bad metadata" in trade publications, technical and scholarly literature, and otherwise scrupulously-vetted library catalog records. What can we learn from this new and longer "digital film" version of *The Sneeze*, and the processes that generated it?



Digital Warhol Greg Pierce, Warhol Museum, Katie Trainor and Peter Oleksik, MoMA Justin Brukman and Chris Vincze, MPC

Andy Warhol was one of the first major artists to embrace film-making, and during a brief period in the 1960s, Warhol produced a large number of films. In 1987, shortly after the artist's death, the films came to the Museum of Modern Art. The physical films are owned by and stored at MoMA, which has been responsible for their preservation. As interest in Warhol's film work continues to grow, MoMA and the

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Andy Warhol Museum have agreed to collaborate on a project to make this cinematic legacy more accessible. Hundreds of Andy Warhol's films, many never before seen by the public, will be converted to digital formats through a new partnership initiated by the Warhol Museum with MoMA and the Moving Picture Company. The project will make accessible the films that Warhol created more than 40 years ago. Nearly 1,000 rolls of original 16mm film stock will be digitally scanned and converted into 2k images. It is expected to take several years to complete the process of scanning and to make the entire collection available for public screening. This presentation will introduce the scope of the project and discuss processes such as digital workflow, metadata, storage, and access.



Stormy Weather (1943) - A Case Study in Sound Restoration John Polito, Audio Mechanics

Considered one of the best Hollywood musicals, *Stormy Weather* (1943) is a showcase of some of the top performers of the time. The all-African-American cast (including Lena Horne, Bill Robinson, Cab Calloway, Katherine Dunham, Fats Waller, the Nicholas Brothers and many others) delivers one show-stopping performance after another in a retrospective look at the career of dancer Bill Williamson, played by Bill "Bojangles" Robinson. One of many highlights is the famous Nicholas Brothers' "Jumpin' Jive" dance number at the end of the movie that was shot in one take.

Existing soundtracks for *Stormy Weather* exhibited low fidelity and distortion during the musical numbers atypical of a well-made 1940's optical track. Fortunately, 20th Century - Fox had preserved the push-pull optical tracks containing the original music recording sessions and they proved to be a substantially superior audio resource. However, this material proved to be challenging insofar as they were in the form of individual tracks that had to be re-edited and re-mixed to match the film. The music cue sheets containing the "roadmap" of which takes were used in the film were lost. What at first appeared to be a simple remixing project quickly escalated in complexity. This presentation will outline the workflow and challenges to restoring this classic American musical, and will include before-and-after clips demonstrating the fidelity improvements that were achieved.

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Interpreting Pre-Cinematic Color: Restoring Thom Andersen's *Eadweard Muybridge, Zoopraxinographer* (1975) Ross Lipman, UCLA Film and Television Archive

Thom Andersen's first feature announced the arrival of one of America's most significant documentary auteurs. *Eadweard Muybridge, Zoopraxographer* is at once a biography of Muybridge, a re-animation of his historic sequential photographs, and an inspired examination of their philosophical implications. While historiographic efforts to reanimate these studies trace to at least J. Stuart Blackton's *The Film Parade* in 1932, the exercise was in this case just a launching pad. Working in collaboration with prominent artists and scholars including filmmaker Morgan Fisher (who helped edit the final work), composer Mike Cohen, Muybridge biographer Robert Bartlett Haas, and narrator Dean Stockwell, Andersen took the visual idea as raw material and expanded it into a profound meditation on the nature of vision. Critic Jonathan Rosenbaum described the result as "one of the best essay films ever made on a cinematic subject."

As the original 16mm a/b rolls of the film were on severely faded ECO, questions arose as to how to best restore the color. Once asked, these questions led to more questions, about the nature of the images themselves. Muybridge's original works as presented in Andersen's review employed a range of antiquarian photographic techniques over a multi-decade career, in the transformative epoch following the birth of the photography itself. Was our task to preserve the original color of the ECO stock that interpreted the images Andersen photographed? Or was it to look back further, to Muybridge's original images? Thom Andersen, who collaborated with UCLA on the project, vocally supported the latter approach. This presentation examines an array of photochemical and digital strategies used in working with the faded ECO original to explore these questions.

This film was preserved in consultation with Thom Andersen from the original 16mm color reversal A/B rolls and the original 16mm fullcoat magnetic soundtrack. Laboratory services were provided by The Stanford Theatre Film Laboratory, Audio Mechanics, Endpoint Audio Labs, NT Picture and Sound, Modern VideoFilm, Inc.

Restoration of Defective Pixels in Digital Camera Sensors Kevin Manbeck, MTI

Digital camera acquisition in the moving picture industry has become ubiquitous. Digital cameras have proven themselves to be extremely reliable and robust. Nonetheless, defective pixels are possible—and even expected—in digital cameras. Most cameras are equipped with automation to detect and map out defective pixels. However, automated camera mapping techniques are insufficient in rare instances resulting in defects appearing in the captured imagery. This talk presents several examples of digital camera defects are discussed.





Rebuilding, Restoring and Preserving the International Olympic Committee's Official Film Collection

Adrian Wood, Restoration Producer for the IOC

The IOC began the process of recovery of Olympic films in the mid 1990s as the scale, diversity and general dispersion of this heritage began to take shape through research and archival rediscovery. What this ongoing project has uncovered is not only the depth and breadth of the materials that survived, in the hands of studios, producers, collectors and archives, but how the films reflected not only the development in sport technology but also that of the cinematographic industry itself. The films broke technical barriers almost as rapidly as athletes broke sporting records. In the two decades since the project's inception, the needs of preservation, restoration and access obliged ever shifting approaches to ensure not only the survival of the collection but just as importantly, its accessibility.

With modest beginnings the IOC embarked on this project by acquiring high quality film copies of the Olympic Films; a process that began over 60 years since the films had been mandated as part of the responsibility of hosting the Olympic Games or Winter Games. Until the arrival of wide-scale broadcast

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coverage with affordable video recording and tape retention, these films, alongside the newsreel coverage, were the only moving image records of Olympic history. Growing awareness of the value of the films, and the realization that high quality film copies were simply not sufficient for contemporary dissemination of the visual heritage of the Games, IOC policy changed to that of full photochemical restoration. Within five years this mandate had become full digital restoration with polyester-based digitally generated photochemical support.

But what to preserve and what to restore remains a central issue. Eight years ago the policy was adopted to preserve all original film elements of all language versions, including off-cuts, in an appropriate archival environment. These were to be stored either in the host countries or in Switzerland. Intermediates were to be stored in a mirror location as not only 'insurance' but also to reflect the cultural importance of the films to host cities and nations as well as the IOC.

Finally, a policy was implemented to support digital migration of all materials required for all versions of each film. Full restoration on film of the original release in the original language version of the host country remains a part of the mandate. Determining these versions was only achieved through meticulous analysis of all extant film elements and textual records before the cycle of restoration for each film began.



Too Much Johnson and Film Restoration in the 21st Century Janice Allen, Cinema Arts

With the contraction of the film universe, there is a surfeit of emotion and nostalgia flooding the media, and a general pessimism expressed in the phrase, 'the death of film.' In reality, many archives are more than ever committed to the continued use of film, especially in conjunction with digital technologies. The presevation, restoration and access to film on film continues to be an important objective for many archives. There is no question that the infrastructure for the photochemical medium has been attenuated, and film laboratories face unprecedented technical and economic challenges. Access to high quality laboratory services either internally or from an external provider, remains a key factor for media archives committed to film. For these archives, at least some resources will be devoted to preservation on film and to the creation of new prints. This presentation will discuss a number of recent film-to-film restoration projects, including the photochemical work on the Orson Welles film material associated with his production of the play *Too Much Johnson* for George Eastman House. Examples presented will demonstrate the image quality of film preservation techniques that have been consistently developed over almost a half a century, and provides an opportunity to examine high quality restoration for characteristics of the photochemical image not yet captured by digital technology.

The Reel Thing Technical Symposium is organized and coordinated by Grover Crisp and Michael Friend	
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