FILM PRESENTATION FOR THE 21st CENTURY



70MM SUPER DEFINITION CINEMA

International 70mm Publishers The Netherlands

INTERNATIONAL 70MM PUBLISHERS RVW present

FILM PRESENTATION FOR THE 21st CENTURY: 70MM SUPER DEFINITION CINEMA

Publisher JOHAN C.M. WOLTHUIS

Assistent publisher WOUTER A. DE VOOGD

Co-producer PAUL H. RAYTON

Copyright 1999 by: International 70mm Publishers, The Netherlands

ISBN: 90-803503-2-X

Reprints or photocopies are only allowed with written permission of the publisher

Also see our previous publication:

70mm Promotion: "Enhancing the Moviegoing Experience Through Superior 70mm Presentation"

Front page: left: 65mm camera, center: Kenneth Branagh & Alex Thomson on the set of Hamlet, right: Metropolis Antwerp, Belg

Contents

6	Introduction	Paul H. Rayton
9	For Lack of Vision	Johan C.M. Wolthuis
12	In the Splendor of 70mm	John P. Pytlak
15	70mm is Alive and Well and on its Way Back to Hollywood	Christopher Reyna & Judith Rubin
22	70mm Doesn't Cost, it Pays!	Paul H. Rayton
26	How to Create the Best Experience in Your Cinema	Thomas Hauerslev
27	Nostromo Laboratory Costs	Robert A. Harris
28	Original 70mm Films	Johan C.M. Wolthuis
30	Wide Screen Systems	Johan C.M. Wolthuis & Paul H. Rayton
32	Cinema of the Future	Rudolf Das
34	Jumbo Screens Need to Lighten Up	Glenn M. Berggren
37	"We had a total of Nine Cameras"	Mikael Salomon
38	70mm at the National Museum of Photography, Film & Television	Bill Lawrence
40	The Chicken and the Egg	Wouter de Voogd
42	New Applications for Large Format Film	David Richards
50	America's Sistine Chapel	Scott Marshall
52	Digital Sound & the Megaplex Derail Large Format Cinemas	Bill Kallay
59	Promoting 70mm to the Public	Grant Lobban
62	Acknowledgements and Background Information	
63	70mm Super Definition Cinema logo	

This book includes a poster depicting the Cinema of the Future: a futuristic view on cinema design by Rudolf Das

For Lack of Vision

by Johan Wolthuis

Periodically there is a glimmer of hope on the horizon, hope that something is going to happen, resulting in the revitalization of the 70mm processes for film production and exhibition.

In early 1998 there were some twenty 70mm blowup prints of *Titanic* in circulation worldwide, prompted by James Cameron's tradition of doing things better than anybody else.

In 1996 we were treated to Kenneth Branagh's Hamlet presented in 70mm, even filmed with 65mm cameras. An enterprising initiative inspired by noted British cinematographer and expert 65mm photographer Alex Thomson, BSC.

Prior to Hamlet, previous efforts to use and revitalize the process occured back in 1992, when Ron Howard used Panavision Super 70 cameras as well as new Arriflex 765 cameras, for his epic production of Far and Away, with Mikael Salomon as Director of Photography.

And in 1993 Bernardo Bertolucci had been persuaded by his Italian master cinematographer, Vittorio Storaro, to use the new Arriflex 65mm cameras for the Asian part of his production of *Little Buddha*. At about the same time the documentary *Baraka* was filmed in Todd-AO 70mm. But forty-seven years after the development of the standard 70mm process Todd-AO, Hollywood has

not yet decided what to do with 70mm in the future. What a lack of vision!

A rebirth?

Will there be a rebirth of 5 perforation 70mm? Will there be a completely new 70mm process? And is the film standard going to remain 35mm? Digital cameras may make some inroads for low-budget projects. Every year computer generated films break new boundaries with their enormous potential for manipulating images!

But no matter how you dress it up - DTV, HDTV, Home THX, Plasma Screens or Digital Surround people can never experience true cinematic excitement at home as they can in the cinema, first and foremost because TV screens will always be much smaller than large cinema screens. It will always be the tube, the Telly, even if it's dressed up as a "home entertainment center". And despite having a home equipped with video, CD-ROM and DVD, people will always want to go out for events, including going out to the movies in an attractive environment, one which offers different forms of amusement, restaurants, shops, etc. None of these alternative diversions can or will. however, surpass Super Definition 70mm images: original 65mm photography, projected with a rocksteady 70mm projector and an optimum light source, and new up-to-date projection lenses on an immense curved wall-to-wall screen!

A little History

The days of the first 70mm go back to 1914 and to 1923 in Italy when a 5 perforation 70mm film was used for the screening of one sequence of a commercial feature. And, in 1929, Fox Grandeur News was presented in 70mm widescreen. Grandeur was a 70mm four perforation system, giving an aspect ratio of 2.13 x 1.

In 1927 sound began to add it's own set of problems. The Jazz Singer was introduced as the first "Talkie". Al Jolson sang a few songs and only spoke two sentences, leaving the rest of the film "silent", but the success of this first talkie inspired others. In no time there were more than 200 incompatible systems, a nightmare for projectionists, not to mention theatre owners!

In 1932 Technicolor introduced their first three-strip camera, splitting the image into red, blue and green and giving birth to the classic name of color in the movies. Now development attention became focused on sound and color, but even then experiments with different wide screen processes went on. However by the mid-thirties the different wide screen cameras were put in storage, as exhibitors were unwilling to invest in improving their image on the screen. They had enough problems with the major costs of the different sound systems, with sound-on-film and sound-on-disc!

In the Splendor of 70mm

by John Pytlak

"In the Splendor of 70mm": For some, that phrase conjures up childhood memories of standing in a line that stretched around the downtown block. When the theatre doors opened, hundreds filed in, politely rushing for their favorite seat. As the curtains on the huge 60-foot screen opened, the screen filled with clouds and you heard the whistle of the wind around you. Breaking through the clouds, you found yourself flying through the passes of the Austrian Alps, with an eagle's eye clear view of the majestic valleys and villages below. Finally you flew toward Maria, and the hills and the theatre came alive with The Sound of Music. Three hours and twenty minutes later (including intermission), as the family sung "Do- Re- Mi" in the car during the ride home, you wonder why that movie looked and sounded so much better than the films you usually saw at your neighbourhood theatre, which was just a short bike ride away from home. Somehow, "In the Splendor of 70mm" on the marquee usually meant something special, even if the movie was more to your mother's taste.

As you grew older, you sought out that special experience again and again, with movies like 2001-A Space Odyssey and Patton, then Star Wars and Apocalypse Now. You took your kids to ET -- The Extraterrestrial and Indiana Jones and the Last Crusade, even if it meant driving across town to see the movie in 70mm.

The Dawn of Digital

A few years ago, paradoxical things began to happen. All movies started having wonderful stereo sound that rivaled, and even surpassed, the best you heard with 70mm, even if it was too loud at times. Magnificent new theatre complexes were built close to home, with dozens of screens and comfortable stadium seating that put you close to the huge wall-to-wall screen. Sure, you missed the curtains, but who watches the curtains during the movie?

Small Film on a Huge Screen

Then you take the family to see Titanic, the epic hit of the year. Surely the new mega-plex is the best place to see it. When the film starts, you notice the trailers look a little worn, and some even seem to have been damaged by the projector's heat. When the feature hits the 60-foot screen, the picture is fuzzy and dim, with dull colors that almost look faded. It must be some sort of special effect. You really enjoy the story and the sound, but something's missing, as you say to yourself "I must have accidentally worn my old glasses." The closing credits are almost unreadable, seeming to breathe in and out of focus, as they weave side-to-side. As you leave the theatre, you ask the young manager whether the print was 70mm. He politely says that all of their projectors are 35mm, and that even the two theatres in town that still had a 70mm projector couldn't get a 70mm print. "Anyway," he adds

confidently, "70mm is obsolete since 35mm now has digital sound." When you complain about the picture quality, he agrees and admits that there have been a few complaints, but notes that the print in the smaller auditorium looks better. "Would you like some passes to see it again on the 30-foot screen?"

Epic Film on a Huge Screen

A few weeks later, you're on a business trip to Los Angeles. Checking out the footprints at the Chinese theatre, you notice that Titanic is starting in 15 minutes. Since you have a few hours to kill, you buy a ticket. As you take your seat, you take small pleasure at the anachronisms of the old movie palace. Then, Titanic fills the huge screen, and blows you away! As you fly over the deck, you can see fine detail you didn't see before. Rose and Jack are surrounded by a vibrant sunset. The clear night sky is filled with pinpoints of starlight. The terror of the sinking is intensified by the shadowy details you missed before. The closing credits are sharp and steady. As you leave the theatre and walk past the projection booth, you notice the last strand of wide film going through the projector, and you smile, as you again realize "The Splendor of 70mm".

"The Splendor of 70mm" Is Hard to Find Today As good as theatres and movie sound are getting today, something is often missing. The "Roadshow" films of the 50's and 60's had it. The "Event" films of the 70's and 80's had it. It isn't dig-

THOSE WERE THE DAYS



When the magic that is "Oklahoma" meets the miracle that is Todd AO...something worderful happens! Sublenly you're there... in the land that is grand, in the surrey, on the prairie! You live it, you're a part of it...you're in "Oklahoma!"

Because this is a completely new and unique presentation, seithout precedent in modern entertainment, all seats for "Oklahoma!" will be reserved as in the legitimate theatre.



70mm Doesn't Cost it Pays!

By Paul H. Rayton

Virtually anyone who was alive and tuned into movies in early 1998 saw the blockbuster, *Titanic*. That film is the "poster child" for the advantages of utilizing 70mm prints in theatrical exhibition.

Higher Costs?

The 70mm print is, of course, twice as wide as 35mm prints, so of course it costs more to make. But is it all that *much* more? Let's sort out some facts and fiction.

At long last, 70mm prints are free from the costs of magnetic audio striping. It's the DTS optical timecode that makes this magic happen. This development brings down the unit costs of 70mm prints right from the word "go". There is no track application, no "printing" [recording the track], and no need to run each and every print to check the quality of the recording job. Result: prints now cost less than ever.

Secondly, there's a popular misconception among some film distribution personnel (whose job description, one would think, would be defined as getting the best images on cinema screens). Some seem to operate under the premise that 70mm prints are too much trouble. Other than a separate line in their bookkeeping and listing the prints on inventory however, that excuse is simply a non-issue. Their job isn't to cheapen the exhibition experience of the public, it is to improve it, and to maximise the best exposure of the subject film.

Additionally, these distribution personnel have misconceptions (largely held to reinforce their prejudice against wide-format prints) about the technical performance of 70mm prints. Titanic, in the Los Angeles area, ran in 70mm on two screens. In the first few days of the commercial run, excessive precautions taken to avoid sound problems actually created one sound problem at the Westwood site, and one other problem was caused by poorly-maintained platter feed rollers. Needless to say, word that there had been a couple of sound dropouts early on were immediately accepted as gospel by key people in the distribution arm of 20th Century Fox, and glibly cited as "evidence" of how the whole thing (70mm) was a waste of time and energy.

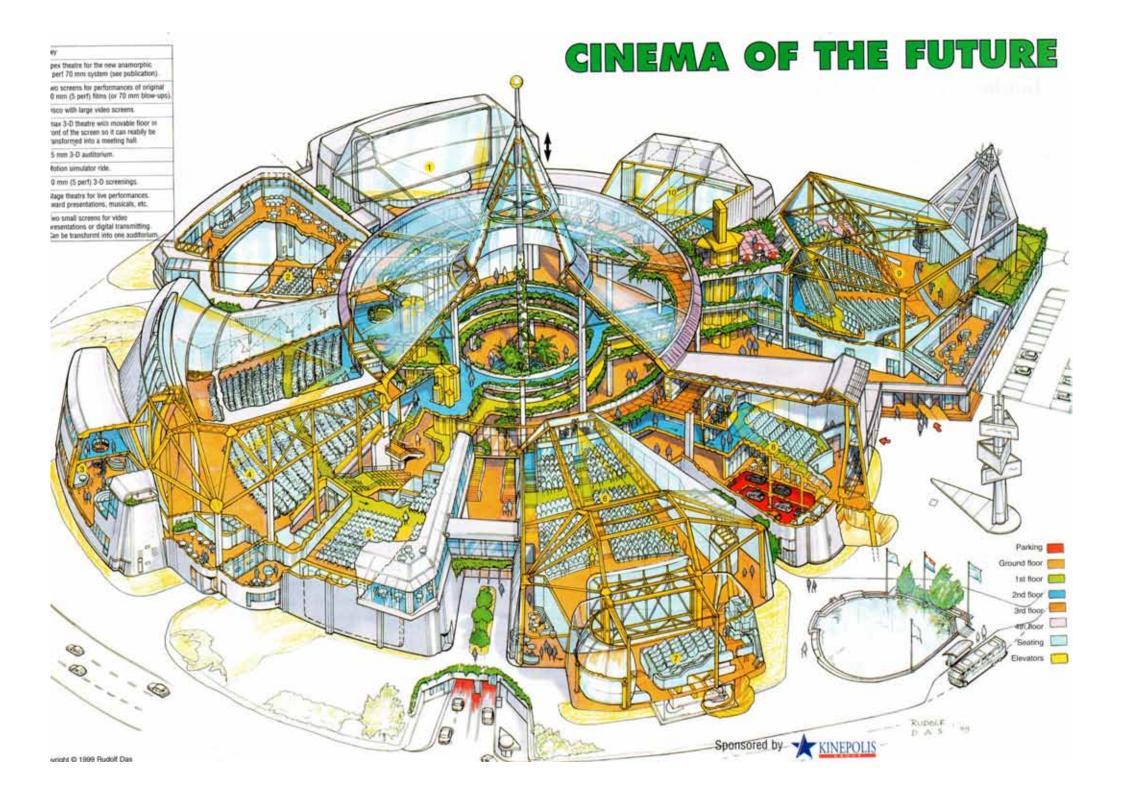
Don't bother them with the facts or anything... The record shows that virtually all other 70mm runs on *Titanic* were dropout free; detractors only could seize on the occasional problems for less-than-worthy purposes. Of course, the only optical sound process for 70mm right now is DTS, and some Dolby techs, who like to think of themselves as the King of the [audio] World, never waste a moment when it comes to an opportunity to trash a competitor, justified or not. As a projectionist working in a 6-screen complex, I can tell you that *every* digital sound system can have a bad day (or a bad print). The efforts to besmirch 70mm DTS are born of jealousy, and, not insignificantly, the fact that the Dolby "SR.D" digital process is the least-adaptable

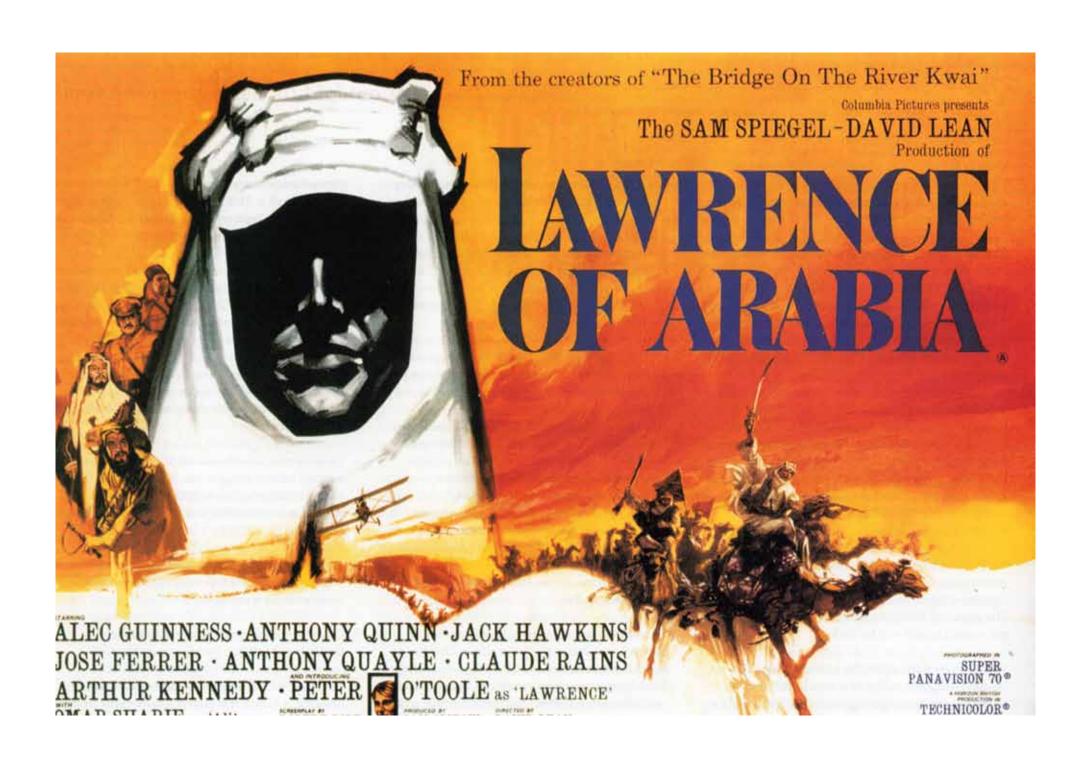
to 70mm exhibition. If Dolby can one way or another extinguish theatrical 70mm exhibition, they won't have to develop a reader, or be forced to admit that the costs of adapting their process for 70mm may be prohibitive.

Bigger Payoffs

Even with limited advertising about 70mm prints in use, they continue to draw disproportionately-large audiences to their venues. In Los Angeles, *Titanic* ran at the Village and the Chinese theatres. Each consistently sold out for many weekends into the run. "Of course", you might say, "lots of theatres sold out many shows of *Titanic*." Well, maybe so — but the kicker is that the Chinese is some 1500 seats, not your local multiplex box with its typical 321 seats. Selling 1500 seats for every show, day in and day out, is a feat that was accomplished by having the *70mm print at that site*.

And the Chinese *Titanic* run is quite typical. At the General Cinema North Park, in Dallas, Texas, the audiences were significantly larger than in comparable-sized cinemas in the same market. And see John Pytlak's report (elsewhere in this book) of the experiences in Toronto, Ontario, where a 70mm print was booked and played to capacity houses (ir a big theatre) some 6 months after the commercial run had commenced. People didn't come out in these numbers just to see Kate & Leonardo, nor to hear Celine sing her song again! *They came to see it at these sites because it was a 70mm print*.







GORDON MacRAE-SHIRLEY JONES

CAMERON MITCHELL - HENRY EPHRON - HENRY KING - PHOEBE - HENRY EPHRON - RICHARD RODGERS - (



The original work of a film was the image, in all its detail, on the camera negative, at the moment the film was exposed. After that, the image begins to be lost. The latent image, before the film is developed, begins to fade. After development, most types of color dyes start fading, and the film base starts to shrink and discolor. Every time the negative is used to make a positive, it is run on machines that wear out the edges and sprocket holes, and there is a risk of scratching the image as well. Each time a projection print is run, it too becomes gradually worn out and needs to be replaced by once again copying and causing additional wear to the camera negatives. It is a difficult challenge, to preserve a film while, at the same time, see it as often as it deserves to be seen.

Great films like Ben Hur, and great formats like MGM Camera 65, are museum pieces that should be held in the highest esteem. They are the greatest works of American culture. To hide them away and let them decay is our shame. Sharing them with the world would be a mission that should engender enormous national pride. America's greatest gift to the culture of the human race is its film art and technology. If we let it vanish, we'll be seen in the future as careless, artistic cretins. If we preserve it and treat it with the respect and reverence it deserves, our children and their children will be forever thankful.

What YOU should know... about - TODD-AO!

THE SCREEN'S NEW MIRACLE INVENTION



ARROWS INDICATE POSITION OF SOUND TRACKS ON FILM

BREATHTAKING! REAL-AS-LIFE!

A completely new, exciting, breathtaking system of motion picture presentation...that captures the vast grandeur, spectacle, music and romance

with a realism never before achieved on any screen!

HOW IS THIS DONE?

- 1. NEW GIANT 70 mm FILM . . .
 TWICE AS WIDE AS STANDARD
 FILM FOR FINES CLARITY, COLDS!
- 2. NEW GIANT CURVED SCREEN . . .

 138 SHOWS ALL THE SYST CON-

EXCLUSIVE ENGAGEMENT

in TODD-AO BETWEEN NEW YORK, PITTSBURGH & BALTIMORE!

NEVER...BUT NEVER...SUCH PRAISE!

"OKLAHOMA looks wanderful in TOBD-AO dress . . . sounds wonderful . . . singing is delightful . . . dancing is beguiling . . . !"

"SUPERLATIVE SCREEN ENTERTAINMENT! . . ." -Booley Crowther, N. Y. TIMES

effect on entertainment ... out of this world."

—Edwin Schallert, L. A. TIMES

"Oh, what a beautiful moviet... a new milestone... the best process to come along." — Williams, L. A. MIRROR-NEWS

"BIGGEST NEWS IN SHOW BUSINESS... the scenes are overpowering when seen on huge new Todd-AO screen... spectator has the feeling he is in middle of it all!"

... WILL LIVE AS LONG AS THERE'S & SCREEN TO SHOW IT ON!" -HIDDA HOPPE

By courtesy of the Cinema Museum in London.

51

