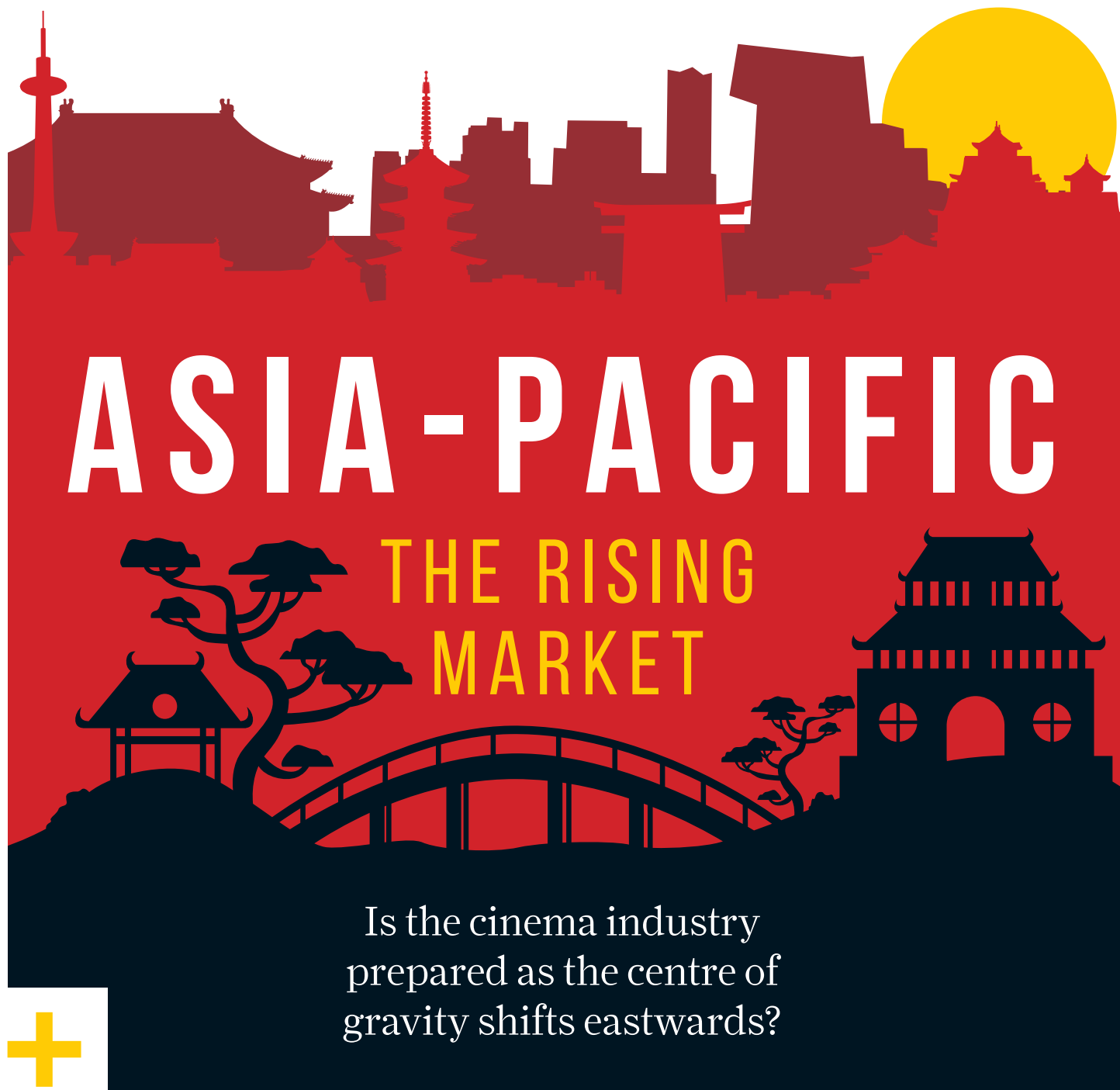


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TECHNOLOGY



ASIA-PACIFIC

THE RISING MARKET

Is the cinema industry prepared as the centre of gravity shifts eastwards?



FOYER FUTURES?

Why “showmanship” is the key to securing the audience of tomorrow

THE IBC LOWDOWN

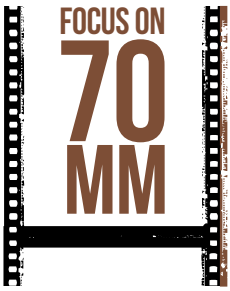
Higher Dynamic Range: the talk of the town at this year’s IBC conference

FOCUS ON 70MM

Culture, technology and history for the cinema’s widescreen purists

Vol 28, No4 produced in partnership with





▼ Curved screens, Cinerama red curtains — watching a film at the Schauburg is an experience

Putting on a show at the

Karlsruhe's Schauburg Cinerama is the antidote to sterile multiplexes. Thomas Hauerslev MBKS reports on its 70MM Festival where things are done differently



As modern multiplexes are becoming more and more sterile — with an increasing smell of popcorn, no curtains, robotic automation presentation, flat screens, and a basic lack of authentic cinema atmosphere — what is the point of going to the movies, when it largely looks like your TV set? Every year in October a group of around 200 people gather in the Schauburg theatre in Karlsruhe, in Baden-Württemberg, southwest Germany. A large part of the audience comes from Germany, but there are guests from all over Europe, the United States and as far away as Japan. What are they doing? They are watching classic 70mm films, several of which they have often seen many times before. Between 9 and 11 roadshow films in three days is sufficient to put most people to sleep, but not this audience. During intermissions, the audience discusses how things were better in the old days, debating the always-popular subject “Do you show a blank screen or not?”, and exactly when they saw one particular film the very first time. Aesthetic and academic talks like these fascinate these folk, when the historic

70mm prints are shown. Although a lot of effort is put into attracting the mainstream, and younger Karlsruhe citizens to be in the audience, the typical festival-goer is often male, often upwards of about 50, who comes back year after year to witness the former glory of cinema-going. Some of the hard-core 70mm audience refer to themselves as “crazy but happy” — including the author of this report.

Showmanship: moviegoing in style

The Todd-AO Festival at the Schauburg is about going to the movies in style. Seeing the films at the Schauburg is like seeing the films as they were originally presented — in a big cinema, on a huge, curved screen with red curtains and a gong [played by the projectionist just before the films starts, to get your attention]. It's all about showmanship and presentation, and few cinemas today — if any — do it better than the staff of the Schauburg. Projectionists Vincent Koch and Marcus Vetter spend weeks preparing each 70mm print for this weekend, and the work they put in pays off. All films are presented flawlessly with perfect focus and sound. Every sound issue is addressed by sound specialist Gunter Oehme, who has pre-auditioned and

optimised the sound for each film. Sometimes he is even sitting on the back row with his laptop to monitor, adjusting each sound channel individually.

Rare treats

The Todd-AO Festival is unique in the sense that it presents ultra-rare 70mm films. Where else can you see DEFA 70 films from the DDR, or rare short films in MCS 70 Superpanorama? Where can you see the campy 1970s *Earthquake* presented in 70mm and including the bone-rattling rumbles of SENSURROUND? “Mainstream” and audience favourites are also presented in blazing 70mm film with six-track sound. Everything is presented in 70mm. There's no digital stuff when vintage 70mm prints are available. Digital DCPs, with all their virtues and qualities, can be seen everywhere, but 70MM cannot. I am not interested in travelling to see a digital replica of a film — I want to see the original. As 70mm cinemas are becoming “rare species”, the 70mm experience will become even more unique, and worth travelling for.

A classic cinema

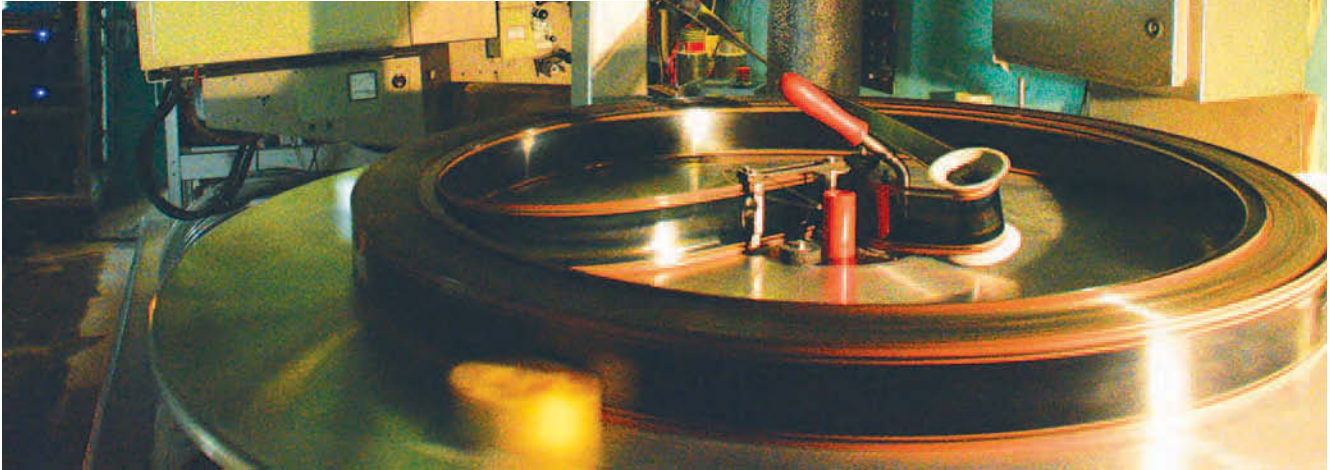
The Schauburg Cinerama cinema is a classic cinema from 1927, with roots dating back to 1906. Mr Herbert Born (b. 1954) is the manager of the Schauburg and he is

ELEVEN YEARS ON

◆◆ The festival has a loyal audience which returns year after year — some have been to all 11 years. It's an annual pilgrimage to see 70mm films, meet the same people, sit in the same seat. No change please. The first show is at

▼ The massive platters required for 70mm prints are part of the furniture in the projection room

Schauburg



taking great care of it. It is an independent cinema and arthouse for the city of Karlsruhe. Herbert started running the Schauburg in 2005, and has won many prizes and awards for his work. The Schauburg is a member of Europa Cinemas, a film theatre network focusing on European films. The exterior façade is decorated with two large, and recently

retired painter, Mr. Hass, who has painted such boards in Karlsruhe since the 1960s. It's probably the only sign with a CINERAMA logo in existence today. The box office is right inside the glass doors, and as guests proceed to the cinemas, they pass the bar and concessions. The floors are black marble, and reflect the lights from the

screen is upstairs, via the listed grand staircase in the old balcony.

Technology at the Schauburg

The Schauburg was completely rebuilt in 1968, when Cinerama Inc. four-walled it to present *2001: A Space Odyssey* in 70mm Cinerama. The projection room was moved downstairs to house the new Philips DP75s, and a new curved screen was installed. Today, the great Schauburg is constantly updated — new screen, seats, ventilation, speakers and floors. All 17 curved rows are on a gentle slope (raked) so everyone has a good view of the 16-metre curved screen. Everything is covered in Cinerama-red drapes, the walls sporting some classic chandeliers, and energy-efficient LED lights in the ceiling. A new Harkness

“THE SCHAUBURG THEATRE’S SIGN IS PROBABLY THE ONLY ONE IN EXISTENCE TODAY WITH A CINERAMA LOGO ON IT”

renovated, red and blue SCHAUBURG neon signs. A six-metre wide hand-painted billboard sign sits right above the entrance doors with flashing “runner” lights encircling it. The sign was created by a

ceiling. The grand cinema is called “Schauburg” (350 seats), but there are two additional screens, “Bambi” (61 seats, 5m x 2m screen), and “Cinema” (150 seats, 10m x 4m screen). “Cinema”

10am and people go in, some sitting in the front row to be “consumed” by the screen. All films are introduced with anecdotes about the production. Often a Sunday morning lecture sets the scene with a presentation and a short clip. The audience sometimes correct the lecturer on dates and details, but that’s part of the show. Rarely seen or

forgotten 70mm shorts are also often presented then. It requires a good understanding of the audience’s needs to “nurse” them so they feel motivated to return. The Festival ticket (a pass that gives access to all films during the weekend) includes meals, which enhance the social dimension. All things 70mm are discussed at long tables in

the Schauburg’s beer garden. A 48-page souvenir program includes details and pictures of the films and is a treasure to take home and keep.

➡ Going to the Schauburg is a unique experience. But don’t take my word for it. Judge for yourself when the 12th Todd-AO Festival returns in October 2016.

FOCUS ON 70 MM

▼ The Schauburg had custom-made six-track magnetic heads built to handle prints that, over the years may have shrunk somewhat

screen was installed ready for the premiere of Terrence Malick's new movie *Knight Of Cups* in 4K on 10 September. Herbert told me about the screen: "It is a Harkness Perlux 140 with a 1.4 gain which helps to reduce the cross-reflections of the deeply curved Cinerama screen at the Schauburg. The older screen was nine years old and we needed to replace it. Since we can take the screen aside and use the backstage for live performances too, wear and tear was starting to show. In fact, we have already taken the old screen down to inspect the speaker systems. The screen is 16.15 metres wide along the curve, screen chord is 14 metres, Todd-AO height is 6.4 metres, and the depth of the screen is 3.45 metres. Projection distance is 23.8 metres, radius is 8.8 metres and screen curvature is approximately 105 degrees. The curved screen has both vertical and horizontal moveable masking and is covered with a "Cinerama red" curtain.

In 2010 the entire B-chain behind the screen was re-installed with five channels of ALCONS type CR4 ribbon speakers (L, LC, C, RC, R) all tri-amped with customised Finite Impulse Response (FIR) type cross-overs. Additionally, 22 JBL surround speakers are hidden behind red draping throughout the cinema. Herbert said that they are happy with the natural sound and performance of these speakers. The draping was specially selected to match perfectly the surround performance of historical needle sound following the good old cinema



owner practice 'performance follows design'. Amplifiers are located in a room close to the screen to minimise the length of the wiring. The speaker towers for the LC, C and RC channel are mounted on wheels to be able to remove them. The screen itself can be pulled aside to reveal a large stage. This stage is used at least once a year for a New Year's Eve party, with live music. The first five rows are removed to make room for a dancefloor.

The projection room is equipped with vintage 70mm machines from Philips: a DP75 and a classic DP70, as well as a Kinoton ST270 non-rewind system for 70mm and 35mm. Throughout the Todd-AO Festival weekend, two projectionists Vincent and Marcus work side-by-side for 14-15 hours each day. They are always modest, smiling, and welcome anyone interested to have a look inside the projection room, talk and take pictures.

Next to the historically correct 70mm projectors are two digital projectors; a Kinoton DCP 30 L (2k) and a Christie 4230 (4k). The Schauburg uses a Volfoni shutter 3D system. Although Germany has committed itself to digital distribution of

are showing. For the 70mm *Vertigo* we have the longer ISCO 8-perf lens (81mm if I recall correctly) because the image is only 1:1.85. For 70mm prints with big white frame lines, like *Die Hard II* for example, we have a shorter lens (72mm) to avoid seeing the white frame lines in the upper left and right corners of the screen", says Herbert.

A BSS Soundweb is implemented as a flexible and expandable central sound processor. All signal routing and B chain alignment and functionality is handled by the Soundweb. Standard or modified cinema processors are used as pre-processors to handle certain film sound formats. Instead of a typical cinema installation which might daisychain signal path, the pre-processors are directly routed to the Soundweb for clean and short signal paths. Sound equipment includes:

- Dolby CP650 with flat B chain for 35 mm optical and Dolby formats
- DTS XD10 digitally feed into the Soundweb for 70 mm and 35 mm DTS
- CP200 modified for short signal path and switchable Dolby A and SR instead of swapping cards
- Sony DFP2000 with flat B chain very

"THE PROJECTIONISTS ARE ALWAYS SMILING AND WELCOME ANYONE INTERESTED TO HAVE A LOOK IN THE PROJECTION ROOM"

contemporary movies, the Schauburg maintains its film projectors for real film shows such as this Todd-AO Festival, but also for other vintage 35mm film shows. The lamp houses are from Kinoton and equipped with a 7000W xenon lamp, which runs at 165 amperes when 70mm is projected.

The main lens is a Schneider SUPER CINELUX (70MM) 75mm F2, designed for 70mm projection. This gives a uniform, bright and sharp image across the screen. It costs nearly \$4,000. The array of lenses also includes an Ultra MC 70c with 75.2mm focal length (for curved screens, hence why it is marked "70mm C") and the Ultra Panavision 70 anamorphic in combination with a 101mm focal ISCO special-design for 8-perf pulldown 70mm (though in this case it's only 5-perf).

"We use different lenses to achieve the best on-screen result for the print which we

rarely used for the few available 8 channel SDDS mixes.

The magnetic pre-amps are custom-built by Scherer Cinema Systems. For backup, pre-amps can easily be switched to a Dolby MPU1. The Schauburg had some custom-made six-track magnetic heads built with modified track widths and positions for better matching to old 70mm prints which may have shrunk over the years. The new heads result in a better playback signal. Magnetic 70mm sound also has the issue that there was no consistent standard for the pre-emphasis used for recording. It varied somewhat, studio to studio. Some prints sound quite different to the "normals", and a dubbed version may sound different from the original. Prints may also sound different between reels when consolidating from different prints. Schauburg aligns pre-amps to an average pink noise of Dolby alignment tones.

► Right at home: the Schauburg's manager, Herbert Born, and the author, Thomas Hauerlev

“TO COMPENSATE FOR PRINTS THAT DO NOT SOUND CORRECT SEVERAL FILTERS AND OTHER FEATURES ARE IMPLEMENTED”

To compensate for prints that do not sound correct, several filters and other features are implemented in the Soundweb for tonal balance in HF and LF, due to issues with pre-emphasis, harshness, channel levels, mitigation of disturbing hums or other noises, and noisy surround tracks. These features are accessible at the auditorium fader for adjustment when listening to the film. During the festival a laptop is used which has access to even more features. The sound system has been planned and designed by Gunter Oehme, Filmtone und Kinotechnik.

The dubbing conundrum

In Germany, foreign films are typically dubbed, and presented in German dialogue. Some musicals keep the songs in English with subtitles. Most of the dubbed versions even have German main titles which I think is quite exciting to see. The efforts that went into this so many years ago are staggering. German actors often really sound like their English/American colleagues, when they dub their voices. I know many reject the opportunity to come because of this, but I believe they should come anyway and enjoy 70mm films — German dub or not. What does it matter? You cannot see this in a proper cinema anywhere but here. I often hear “Why are the films in German”? Well, it’s a German festival, and many of prints come from German archives. “Can’t you show English versions?”. We’d love to, but there are no 70mm prints available of, for instance *Seven Brides for Seven Brothers*. So, we settle for a vintage 70mm print of *Brides* in a German dub, because it is available and rare — and we still hear the songs in the original English voices. It is the only opportunity to see some of these in 70mm — it’s German, or not at all, and we’re trying to solve the “not at all” problem, at least somewhat. We try to have a balance between German dubs and original English versions. **CT**



WHAT IS TODD-AO 70MM?

► Younger readers of *Cinema Technology* may be wondering what all the fuss is about this “Todd-AO 70mm”. Well, 70mm film is a historical film format which was popular from the middle of the 1950s until the early 1990s. Films in 70mm gave the audience a very good illusion of reality, thanks to the large negative area and multi-channel Hi-Fi sound. The 70mm format was utilised to photograph some of the grandest musicals and dramas the 1960s had to offer. You may have heard about *The Sound of Music*, *Lawrence of Arabia*, *Ben Hur* and many more... It was movie-making on an epic scale with literally a cast of thousands.

► Some 70mm prints at the Schauburg are often first generation prints from the original premiere 40-50 years ago. Prints are in good physical condition considering their age, and the sound is often better — or more pleasing — compared to new films. Most of the vintage prints have faded into red, pink, magenta or brown nuances, but that does not seem to be a problem with the audience, although it is always a subject of debate when the blue and green color layers have “vaporised” and left the rest of the film somewhat monochromatic. Some even joke that new 70mm prints ought to be “factory faded” to protect the eyes of the seasoned 70mm festival viewer!