Steve's Back

His company's tools revolutionized mainstream 3D movie production. Now 3ality Technica CEO Steve Schklair is re-entering the world of special venue cinema.

cross pollination

Steve Schklair is back in the realm of special venue, and he's got the 3ality Technica 3D toolkit behind him
exclusive IPM interview by Judith Rubin

Feature Story

*A*t the Themed Entertainment Association Summit last March, I was pleasantly surprised to run into Steve Schklair, well-known as the CEO of 3ality Technica, developer of sophisticated technology behind the 3D boom in television and feature films. Steve's roots are in special venue cinema, and when I first knew him in the late 1980s he was running Infinity Filmworks with director Keith Melton, producing innovative media pieces such as Sensorium for the Baltimore Power Plant. (Keith still runs Infinity, and the two are still good friends.)

Steve moved on to work in visual effects, video game production and more, always positioned at the point where creativity and new technology converge and always, through his vision and contributions, moving that crossroads forward. His company 3ality Technica is a reflection of that - about half of its 100 employees are engineers and half are creatives.

Steve popped up at the creative/tech junction of 3D filmmaking in the 1990s, when the format was re-emerging via the giant screen industry. He introduced a new 3D camera rig that enabled capture in HD and offered a viable, lightweight alternative to shooting with 70mm cameras and rigs which were (and are) both cumbersome and limited in supply. Not long after that he formed 3ality Digital (now 3ality Technica) and went on to develop the continuously evolving and expanding array of 3D filmmaking tools that have largely fueled the international 3D mainstream explosion, facilitating content creation by making it more streamlined, efficient and affordable.

3ality Technica tools are instrumental in the production of 2012's The Amazing Spider-Man, The Great Gatsby, The Hobbit *(both features)*, Prometheus *and even* Step Up Revolution *and in sports events worldwide for leagues including the NFL, FIFA, and the Indian Premiere League. BSkyB, the most successful 3D television network to date,*

has built its broadcast capture infrastructure on 3ality Technica technologies and methodologies. The company has deep relationships with major studios, top directors and gear manufacturers and a thorough knowledge of production culture and practices.

So what was Steve doing at the TEA Summit? Why does a film industry CEO decide to take the temperature of the attractions industry? Because he's never lost his attachment to special venue production and its unique creative challenges. Steve Schklair is back to shake things up, ladies and gentlemen, and he's bringing the 3ality Technica 3D toolkit with him, plus a wealth of relationships and other resources, and creative fire in the belly. -- J.R.

What do you like best about special venue production? Do you want to get behind the camera again?

New challenges, creative satisfaction and some creative control: special venue offers the opportunity for all of those. I was born a cameraman. I shot *Sensorium* and all those early projects with Infinity Filmworks. I wouldn't mind getting behind the camera again, but I get the same kind of creative satisfaction from solving the technical and logistical problems of unique productions. I want to find a good project and take it on. Hopefully it will be something very new and cool that's never been done before.

I love the work we do supporting features such as *The Hobbit*, but it's not our movie; we play an advisory role. In special venue, you get to participate more in the filmmaking process, and then you get to go work on the install, too - to design components for the theater that do new and cool things. It's where my heart is and it is always innovative and fun - it's great to tell a story in a 12- to 14-minute format.

Steve Schklair in 1984 working on *Sensorium* **.** *Courtesy of 3ality Technica.*

Give us some specifics of what you now bring to enrich 3D special venue production.

I'm bringing the tools and expertise used for 3D features and broadcast production. There's nothing more demanding than live TV: you have only one shot to get it right and no opportunity to fix it later. Since we are fairly camera agnostic, we can switch up a broadcast camera for a movie camera and the 3D tools are the same, although aspects of the workflow are different.

Is the special venue production community using these tools now?

For the most part, they are not- which is why you primarily see animated 3D in special venues. The special venue sector hasn't been deeply involved in the discussion in the feature film and television world, and it's only in the last few years that the tools have existed to this level. 3ality Technica developed this technology so that 3D feature films could be made on 2D schedules and close to 2D budgets. And that has worked out: the latest *Spider-Man* was planned in 2D up to a few weeks before production began; it switched to 3D with no change in schedule and finished on time. It's the same with the other 3D features we've been involved on - for none of those has the director had to wait for the 3D cameras to be tweaked before every shot.

The tools we're using today have zero to do with the tools we used to use when I was in the special venue business in the '80s and '90s. Live action 3D is no longer among the dark arts.

What are the key tools?

The 3D rigs and the Stereoscopic Image Processor™ (SIP) are the crucial ones. The new 3D rigs shoot very, very high resolution and can be hand-held, or run on a Steadicam or the end of a jib arm. They can go anywhere and are 10 times more capable than those big old hunks of metal we used to rely on for live action 3D shooting. For special venue nowadays you'd go with RED Epic cameras that shoot 5K; the rigs and cameras are wireless so the Steadicam operator can run free and move fast. They also have more motors and axes of motion than the old ones, which is important because you can align them remotely. In the past, camera alignment and weight have been the biggest problems for special venue 3D shooting.

It used to be that when you shot 3D, you'd put the cameras on the rig and then spend a couple hours aligning every shot. The new image processor is a real-time image analysis device that is constantly monitoring alignment frame by frame. If it sees anything off by even a half pixel, it sends a signal to the camera to automatically readjust. That not only saves a huge amount of time on location, it also eliminates most of the need to fix in post and is how we are able to do 3D live broadcast. The image processor also monitors color match and focus match.

This is all stuff we invented at 3ality Technica. These tools are needed now in special venue, where you always want to apply the latest and greatest to keep making new things, and differentiate leisure offerings from the neighborhood movie theater. Regular movie theaters are now starting to add 4D effects, so it's time to come up with even more new stuff.
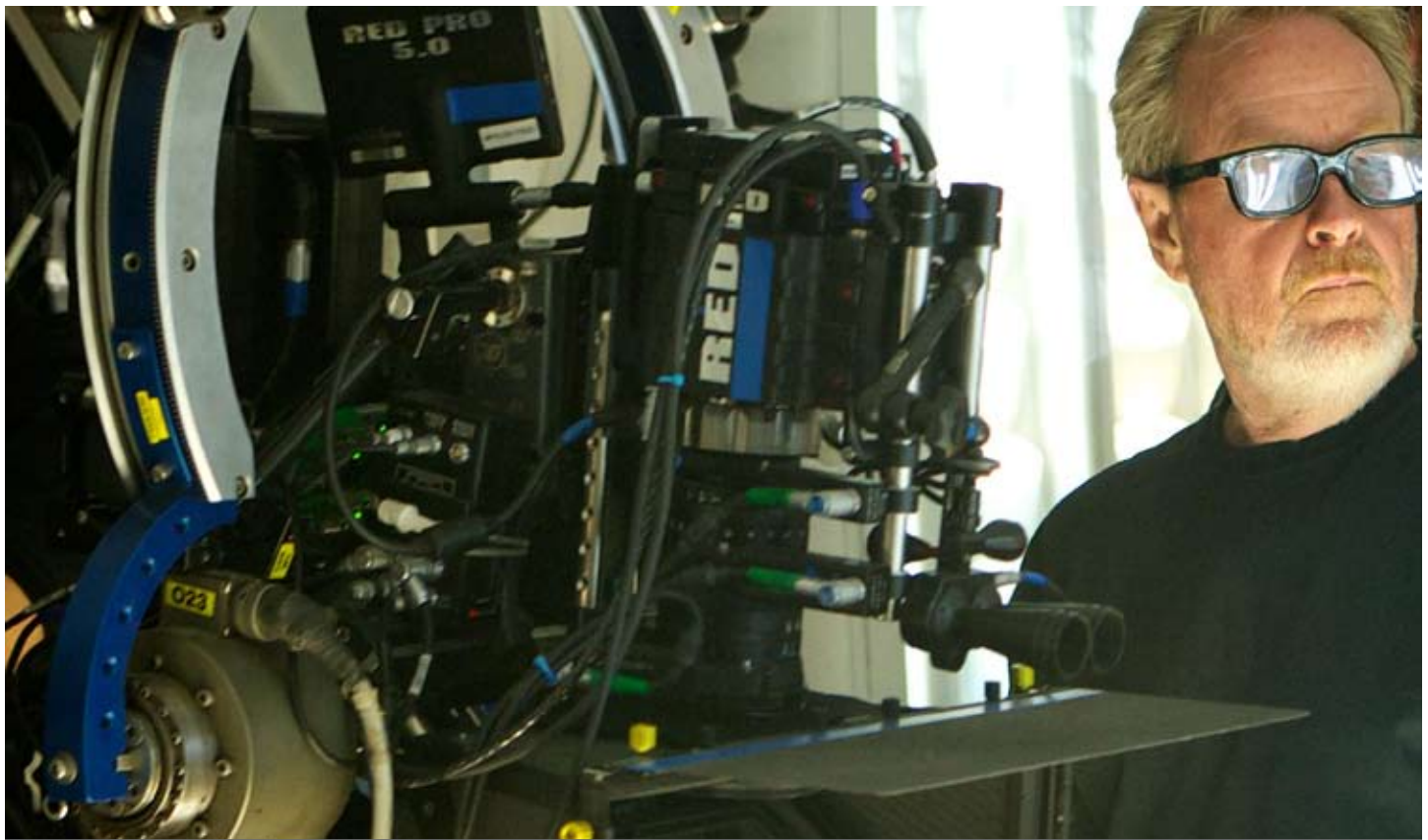
Is there a place in special venue for live 3D TV as well?

Yes. In fact, there is 3D broadcast now of every major sporting event, including the 2012 Olympic Games and the World Cup. Theme

Charlize Theron on a behind the scenes break in "Prometheus" flanked by 3ality Technica 3D camer/rig systems with RED Epics
© WBC | ZoomWerks, Los Angeles

Ridley Scott with 3ality Technica 3D camera/rig systems with RED Epics on the set of "Prometheus" ©*WBC* | *ZoomWerks, Los Angeles*

parks could, for example, simulcast or play back live shows in 3D, especially if they have brought in major musical talent.

Speaking of major musical talent, tell us about the U23D movie, produced by 3ality Technica.

U23D was the first live-action 3D film shot digitally and put into theaters. I would say it was more of an art project than anything else, along with a proof of concept. I had theories that audiences could be comfortable watching 3D for 2 hours, not just 12 minutes, and it was a chance to put those theories into practice. We used effects that nobody had ever before done in 3D, and it was a huge breakthrough.

3ality Technica is represented by ICM. Will that be utilized in pairing your company with special venue projects?

It will support the endeavor. If we need access to talent, to top directors, we can reach out through ICM, as well as through our own established relationships. In conversations with features directors, I find that most of them are interested in special venue. It appeals to them because of the shorter length and as an opportunity to do something different.

Access to top Hollywood talent is certainly one of the things we bring to the table, along with an understanding of what a major feature or visual effects director expects in a work environment.

What about the projection end of things?

Projection should be digital. At this point, I think special venue producers need to look at digital laser projection for lots of reasons, including brightness and cost savings, but also because these projectors don't need to be housed in a big booth. You can hang them right in the theater, and their flexibility and small size open up a new world of creative possibility for 4D experiences.

What are some of your favorite past projects in special venue?

Sensorium, first of all. It was such a challenge, and my first 3D project. The budget was ridiculously low, and we had to solve so many technical problems. But we were just out of film school, so of course we said yes. What we were trying to achieve would have been easy in today's digital world, but this was analog, crazy, impossible. The show included smells. We were syncing smells to the movie using a timecode hack because it was playing from a 35mm projector. It was a 15-minute tour of period America, based on Phineas

Fogg, the centerpiece character of the Baltimore Power Plant. For a budget so far below $1 million that I don't want to mention it, we shot a 3D film that required location shooting all across the US, with synchronized smells added in post. I was the DP: I co-produced and drove the truck. We'd shoot all day and stay up all night and produce. Keith Melton was director and co-producer. This was in the mid-1980s, an amazingly fertile period for themed entertainment.

Our work on *Sensorium* led to being hired for another huge and rewarding challenge in the 1980s - recreating the shots for a series of attraction films in which the 3D wasn't working for Warner Brothers Movie World in Australia. They needed to replace about half the footage, and it had to be an exact match in terms of the location, lighting and color. That was one tough assignment!

More recently, we shot the film for the 4D theater at the Newseum in Washington DC, working with Cortina Productions. That project was the very first with our new 3D digital rig. We brought in Peter Anderson as DP.

My background is cinematography, film producing, special effects, 3D and digital technology: that's kind of perfect for the special

venue world. My favorite projects are where I get to solve problems and do things that have never been done before, and with 50 engineers on staff, I have the resources now that can build anything, manufacture anything, and write the code.

Where can we expect to find you at industry trade events?

I'll definitely be at IAAPA this November in Orlando to speak with potential partners. I'm ready to meet with designers, park operators and distributors. We have merged production and technology as no one else has done, and this is one of the reasons mainstream 3D took off - because of this dialog happening right where it needs to happen. I have encouraged that. 3ality Technica engineers get to go to movie sets, see how tools get used, talk to filmmakers and find out how the tools can be made even friendlier, even faster. The possibilities for special venue are very exciting and I can't wait to get started. •••

Steve Schklair from the 1980's *Photo courtesy of 3ality Technica*

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