

THE DIGITAL RELIGION

By Lenny Lipton

The announcements by of film-based 3D systems, which might cost exhibitors comparatively little money to install, was provocative to say the least. According to what's in print, one approach would cost about \$12,00 per lens for a lens. In addition a so-called "silver screen" – say 40 by 20 feet – would be another \$8000. If you compare that to the cost of a digital system, it is approximately one-tenth of what such a system would cost over a five-year period.

I saw such projection, which was at an unannounced one-week four-wall at the AMC 16 in Burbank, in theater number 4. I thought what I saw was dark but might be good enough to sell tickets with a major reservation or two. It was not as good as stereoscopic digital projection when up to spec.

What I did see on the screen at the AMC was an image that I thought would be acceptable to a lot of attendees, but did not have the same crispness, bounce, sharpness and brilliance of good digital 3-D projection. The problem has been identified and it's the problem of not having enough screens for the stereoscopic feature releases, as has been noted in the Hollywood trades and in studio head tirades.

When I came to Hollywood five years ago and sat in meetings with people from the studios, digital projection had not gained traction. In fact, many technical people from the studios were dead set against it. In the ensuing four years there has been a sea change. Digital projection has become accepted as part of the digital religion. And as with any belief system it's hard to have a straight up conversation with the believers, because questioning faith is a losing game.

As many of you know, the cinema has been going digital (or electronic, or whatever you want to call it) for the last decade or so. Although most movies are shot on film, most use a digital intermediate mastering technique, which is a fine improvement over the old optical post technique. It does produce what I consider to be very much better-looking release prints, generally speaking.

However, the argument that is made for the financing of digital projection and its assumed proliferation are curious. That's because digital projectors are expensive, in the range of \$40,000 to \$80,000. That means that when a new theater is built, a projector can be neatly financed as part of the installation, but for retrofitting an existing cinema there has to be a way to finance the new projector that makes sense to the exhibitor.

The digital cinema imperative is its stereoscopic capability. It's true that you can show live special events, but that's a drop in the economic bucket compared to the return on investment offered by the stereoscopic cinema. The public doesn't care whether or not a show is digital or on film, but they do care whether it's 3-D or 2-D, as the attendance and box office revenue numbers prove.

With only a small fraction of the 130,000 theatrical screens converted to digital, and with a few 3-D movies coming out every month, there's a log jam. Movies can't play long enough before they are bumped out. Everybody except the audience is leaving money on the table because many of these films are holding.

Thus the studios have banded together in an attempt to create an initiative to help pay off the price of a projector; but that payoff takes between five and ten years, and it's the theater-owner who pays it off slowly with something called a "digital print fee," which is about \$800 every time a new film is shown on his projector.

The studios want to be able to distribute digitally because it's allegedly less costly. But by the time they finish paying for the projector it may need to be replaced. It's the damn strangest financial strategy but hardly unique.

Smart people recently brought our economy to the brink so I wouldn't take this scheme for granted. Just when the "old digital" projector is paid off you'd have to start the financing scheme all over again. Maybe by that time a digital projector will be less expensive. Maybe the exhibitor will buy a 35mm projector. Maybe by that time we'll see flat panel theater sized screens making projection obsolete.

The roll-out of digital projectors has slowed because of the recession so a means for projecting 3-D using 35mm sounds even more interesting. As you may know, this studio financing initiative is, as of this moment, unfunded. Just like the Emperor's new clothes the flaw will be found out sooner or later, but the executives who made the digital decision may very well be gone by the time that happens.

Digital projection can be quite good. Whether or not digital projection is better than film projection depends on the theater. Film projection can very good too. But you cannot assume that either is good in all cinemas across the country. I've been in a lot of theaters and screening rooms in this town where somebody set the projector menu incorrectly and we had the wrong color space, the wrong this, the wrong that. That doesn't mean that this is a K.O. punch for the digital cinema, because digital projection can be quite beautiful – rock-solid steady and the prints don't wear. No scratches, no dirt. And film has its issues too, but it has done quite well for over a hundred years.

A digital projector is hard to operate compared to a film projector. There are too many choices, too many resolutions that are possible, too many color spaces. When you load film on a film projector there's no ambiguity. You just thread it up, and away you go. It's a much simpler device to use.

I was the chairman of the SMPTE working group that recommended the standards for the over and under systems being proposed by three entities. The major problem with this technology is that improper threading of the film in the gate or splicing the reels together at the sub-frame line rather than the frame line causes the image (created by two Techniscope frames above and below each other) to go out of phase and also to become pseudostereoscopic (inside out).

This is an unbearable experience for the audience (an impractical and partial cure is to turn the eyewear upside down) and it will happen frequently because it is such an easy mistake to make. When that happens in the field (and it will again and again) it's going to be a turn off for film as a vehicle for the 3-D cinema.

One company has stated that their intention is for a system that is a stop gap or an interim system, because, as the conventional wisdom has it, film will eventually be replaced by digital technology. The

only trouble is, gee whiz, this is a self fulfilling prophecy since their system has a built in time bomb with a short fuse, the tragic pseudo flaw described above.

There is a need for a film based 3-D system. For one thing there are lots of places in the world that might never convert to digital because of the low ticket prices they collect and because of the high cost of the projectors.

Or there are places like some countries in South America where the import duty is so high there's no way they can afford one. And if good quality 3-D movies could be projected with a 35mm film projector, the digital religion notwithstanding, the studios will go for it. That's because they are part of publically traded companies and report profits quarterly (film grosses are reported almost instantly) and the need for short-term profits will trump the strategic investment in those digital projectors.

(Full disclosure – My kids easily beat me at chess and I am working on a new system for 3-D theatrical projection.)