Sassoon Film Design collaborates with Tata Elxsi for Stereoscopic 3D projects

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Tim Sassoon, President of Sassoon Film Design (SFD), a Visual Effects and post-production facility in Santa Monica, California with long experience in large format, stereo and feature films was recently in India. SFD has collaborated with Tata Elxsi for two high profile Hollywood feature projects that they are working on. SFD and Tata Elxsi together would be delivering 3D conversion for these two theatrical features.

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Tim has a deep connection to India as he is great great grandson of David Sassoon, who had built and contributed to various prominent buildings in India such as David Sassoon Library & reading room, Fort Mumbai, Sassoon Hospital, Pune and so on. So for Tim this first visit to India along with being a business trip was also a voyage of discovering his family ties.

AnimationXpress.com’s Chaitra Shetty spoke to Tim Sassoon about SFD’s India connection, the creative process of 3D authoring and its future in days to come.
What is Sassoon Film Design into?
Established in 1997 in Santa Monica California, Sassoon Film Design (SFD) has been doing VFX, Motion Graphics and Double Digital Finishing. For first 12 years we were essentially doing IMAX movies, larger format ones. The IMAX market went stereo 10 years ago, so we had to learn 3D earlier on and do it well.

We have done several IMAX movies. First one was 'Siegfried and Roy, the Magic Box'. As a result we realized we could take whole movie in CGI space and make it in 3D. In 2008, after the market crash, the IMAX market dried up. Early in 2009, we took our first feature film for 3D conversion, G-Force directed Hoyt Yeatman. The movie was big success.

Recently we have worked (3D authoring) on 'Alice In Wonderland'. We did the first 10 minutes of the show, the whole garden party scene. Apart from that we did a lot of other stuff like VFX and compositing for the show. We also did a long Comic Con trailer for Green Hornet. It was interesting working with director Michel Gondry as he took the idea of 3D seriously in terms of doing it creatively.

We have also worked on Yogi Bear. In Yogi Bear, like many 3D films of recent times, they couldn't shoot every shot in 3D, like aerial shots and boat shots. The space was too small for the 3D camera rig, so they were shot in 2D and was then converted.

What brings you to India?
We are working Tata Elxsi for couple of movies. We cannot the name the films as now, but they are two big international shows. Essentially we have hired them to help us. But it's more of a partnership that we have with them. We have developed for the last few years a very well accepted 3D pipeline, using that we could turn out very high quality work. But we were not getting the volumes that we wanted. And we had reached the limit of our office. 100 people on two shifts. So you either got to move or find a partner. That's how we collaborated with Tata Elxsi.

We have trained a lot of artists from Tata Elxsi that came down to LA and we have one of our best people here to train artists here in Mumbai.

So is 3D conversion the focus your business?
At the moment yes. Conversion is a creative process. And the reason why studios
want to go for conversion today instead of shooting (in 3D) is to have creative control over the process and actually be able to design the 3D space. We are past the point where it was a novelty. If you do 3D today just for the sake doing 3D, the audience will reject you outright. It needs to be approached creatively and that's what is happening. I wouldn't call it 3D conversion but 3D authoring, because we are authoring and designing the 3D space.

**What's your take on films which are shot in 3D vis-a-vis films converted to 3D?**

It's like instead of doing lot of VFX for a movie, you are doing a lot of stage FX on the set. It is that kind of difference. The advantage of shooting in 3D is that at the end of the day you walk away with what you wanted in the can which pretty much works for you. However if it doesn't work for you have to start all over again. One of the problems of shooting in 3D at the moment is it is very difficult to edit with spatial characteristics of photographed stereo images.

There are some tools which come sort of close to doing it, like Nuke OCULA or SGO Mistika. The common problem with both is that they work with what's called disparity Map, which spots the difference between the frames. If all the elements in one frame are similar to the elements in the other frame then everything is fine. But normally something hidden behind something appears in one frame and then it's a problem and the problem is that it happens a lot. We can fix it, but we have to essentially take everything in the frame apart and start from the scratch and it gets expensive. There is no midway.

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It also depends on the VFX content of the film as well. Higher the VFX content, the easier and cheaper it is to do conversion authoring. Because nothing you shoot is going to be correct any way. For Example think of 'Alice In Wonderland'. One of the scenes has Alice riding on the shoulder of this huge creature. So you have to shoot full size Mia Wasikowska (Actress playing Alice) at a proper right angle, at proper height on some kind of fixture that goes up and down. So where are you going to have the camera, that is going to be correct and remember the left and right camera have to be 10-15 feet apart. So it is not easy to do as it has to be proportional. It is easier to do it, when you have all the maps and CG elements in place, you can make them easily work together.

Then comes the aspect of designing the 3D space. One of the films that we are working on is a children's film and the filmmaker didn't want the 3D space to be very challenging, so the background is fully flat but the foreground characters have to be rounded. G-Force was pretty much like this too. Children under the age of six don't have a very strong stereo perception. You have to be careful while making 3D movies for them. So we can do that when authoring, have different values for the background and the foreground. Flatten disturbing things in the background.

The big problem that we are facing right now is that the cameras are essentially designed to capture either 3D image or 2D image. But they are not equipped for producing 2D images with depth meta data. It would be good if along with the 2D
image I got the edges, the depth pass and basically enough additional information that would help create a 3D image from the same.

Also we are pretty much doing the right thing, by taking the footage into the CGI space and then creating 3D cameras on that. The stupid thing is that we are getting there with the most inefficient way possible, that is with rotoscopy. There should be a way to do it mechanically.

**What kind of future do you see for 3D?**

3D is here to stay, especially for animation films. One thing we know about the film business is that they like to noodle with every aspect of the film. The director wants to change everything. So if you have an image whose focus you cannot change because its shot that way, it means there is trouble, a possible reshoot in future. If you shoot in 3D if you got it right its good, but if you got it wrong, there is not much you can do to fix it. That goes against the grain of what director wants. They want to be able to edit every property of the film.

Things like rotoscopy aspect of the process will reduce in time. The need to design the frame and people skilled to design the frame for 3D will be there for a long time. It (3D authoring) is a full creative property of the film like color, sound, cinematography and it requires an entire crew, essentially another list of credits and another award category.

**Apart from theatrical what are the other platforms that 3D will grow onto?**

The other platforms are the problem at the moment. I don't personally believe that public will flock to 3D experience for general TV viewing. May be for rented videos, but not for general TV viewing, because the concept of wearing 3D glasses at home doesn't work.

There are autostereoscopic display solutions coming up but they are only viable in small devices due to the cost factor. Like Nintendo 3DS has an autostereoscopic display but they are hard to make in large size. So they are predominantly being made in smaller portable devices. And that is what I feel is going to drive the market. LG, HTC and others are coming up with 3D camera phones. May be Apple will come out with one soon.

I think 3D at home will be very easy to do, because all you need for a 3D active glass is a panel which will run at double the framerate, interferometer and software. And these don't cost that much. So every TV you buy should be 3D capable in a perfect world. When you have bought or rented a 3D Blu Ray you can make your once a month movie watching experience special. People wouldn't mind wearing 3D glasses in that circumstance.