Best Kept Technical Secrets, AGECT Conference hosted by NFTA, Amsterdam

September 5 & 6 followed by IBC September 7 –11, 2007

Where have all the Steenbecks gone?



two delegates from GEECT and CILECT schools (heads of school, technical staff and film teachers) were guests of the Netherlands Film and

Television Academy (NFTA) in Amsterdam to discuss each school's 'Best Kept Technical Secrets'.

It was clear to every delegate that there has been a great revolution in the last ten years in how we make and deliver films. As Doug Shannon from the National Film and Television School in England (NFTS) joked, 'Ten years ago we edited film on Steenbecks and the only things digital were the editor's fingers.' In the meantime, the industry has gone digital (certainly after origination) and is dealing with the complexities of using digital intermediates, HD, 2K and 4K digital origination, post-production, sound design and digital-cinema projection.

The big question for all of us was how to research and get the most appropriate equipment with our schools' limited educational budgets. We were all keen to cooperate and hear each other's secrets. And the question most frequently asked was about data management: 'What's your workflow and is it effective?' Some of us even hoped for bigger secrets (scandals really) but schools getting into bed with manufacturers like Sony, Arri, The Red One, P+S Technik, Avid or Apple seemed boringly like smart management rather than acts of passion.

Involving the schools' engineers and technicians in conferences is not usual at CILECT events. It certainly should be done more frequently. The technical speakers had prepared their presentations carefully and were able to describe complex technical processes in clear and understandable terms. Any delegate who feared being drowned in techno-jargon about colour space or bit depth were humorously pulled along by the witty and lively moderator, the NFTS' Head Nik Powell. He demonstrated what Fellini had always believed, that you don't have to be able to service a car to be a good driver. Nik kept reminding us that there is a range of excellent options open to film schools, from film through

DV to digital cinematography, which gives emerging film-makers experience and knowledge regardless of budget.

A fantastic bonus to 'Best Kept Technical Secrets' was that IBC (International Broadcasting Conference) was in town. So after the presentations and discussions, there were eleven halls to explore at the RAI Centre, filled with more than a thousand manufacturer's stands showing their latest products, as well as lectures, workshops and master classes to attend. Delegates kept meeting up at IBC, sharing observations, as we got our hands on all kinds of new cameras and equipment. I kept thinking of Jack Lemon in the all-woman band in *Some Like It Hot*, salivating: '... I used to have a dream - I was locked up in this pastry shop overnight ... Boston cream pie and cherry tarts. ' 'Listen Stupe,' Tony Curtis cuts in, 'No butter and no pastry. We're on a diet!' That brings us nicely back to education and the conference.

Presentations

After admiring the facilities and layout of the NFTA studios, Tore Maritvold from the Norwegian Film School (NFS) kicked off the conference by calling for GEECT to 'create an arena for discussing technical matters between engineers, teachers and students both inside each school and between schools in GEECT.' He proposed five technical themes for review: 1 digital cinema; 2 HD cinematography and workflow; 3 looking at the close association between film and digital imagery; 4 routing with fibre or copper; and 5 storing and archiving. Tore (Tore.Maritvold@hil.no) and Marc Tiemissen from NFTA (M.Tiermissen@ahk.nl) are already setting up a technical database between the schools which will allow colleagues to see what solutions other institutions are developing.

Tore also organised an interesting seminar at IBC with P+S Technik who demonstrated their SL-2K Digital Cinema Camera, which is available at a bargain price compared to other industry leaders (The Viper, Dalsa, and F-23, etc.). Tore and his colleagues have been so impressed with the camera, that the Norwegian school has bought one! (The first CILECT school with a Digital Cinema Camera?) After this seminar we discovered an industry secret: P+S Technik are working on a 2K digital back for the Arri SR film camera. So

don't start giving those Arri kits to museums quite yet.

On the film or digital camera front Jon Houchin, chief engineer from the NFTS, gave an excellent overview of the advantages and disadvantages of film or digital origination. He reviewed the ten main digital cinematography cameras (the Arri D-20, The Dalsa, The Panavision Genesis, The Red One, The SL-2k, The Sony F23, The Thompson Viper and the Vision Research Phantom) and talked about some of the recent advances in the design and quality of the image. However, he did worry that to buy a digital cinematography camera kit at the moment would be a major investment that might not survive the current speed of technical obsolescence. He had no doubt that digital cinematography is a major part of the future and schools and students should get as much experience as possible through industry support from manufacturers and rental companies. At the NFTS they planned to continue to shoot most final productions on film and to postproduce digitally. Given the situation at the NFTS, he felt that buying a film scanner would represent a good investment

Ben Zijlstra from the NFTA gave an interesting perspective on how they record and design soundtracks to serve the content of the film. He was enthusiastic about the new sound possibilities being offered by digital cinema projection. The limited and compressed sound quality that we are used to in traditional theatres is fast disappearing. At the Academy they had a wide range of microphones and taught a variety of techniques both for fiction and for documentary. All sound is recorded digitally, generally at 48 KHz and 24 bit and, throughout the sound processing, editing and dubbing, the quality of that sound (realistic or non-realistic) was lossless and was only altered for artistic reasons. He showed us part of a film directed by Frank Scheffer called *Conducting Mahler*, which illustrated the power and artistic contribution of a successful soundtrack. Ben had recorded the original sound for Conducting Mahler, which underlined that we were getting no listening to – a master class.

Wim van Slooten from a Dutch production company called Filmmore discussed their postproduction workflow. It was interesting to hear how a small company with limited resources had designed an offline/online system which works in DV resolution but onlines to an HD output. With film origination it was a similar approach: film is scanned on an old BTS Quadra telecine and then after editing is rescanned on an Arriscan, by means of the EDL, at 2K,4K or 6K. This shows that there are many worthwhile solutions to ending up with quality production. With the new digital postproduction workflows you have more choice than ever, but the road is full of pitfalls and you should be crystal clear about the workflow before you start shooting.

The conference ended with an answer to the big question, 'What's your workflow and is it effective?' Doug Shannon from the NFTS explained: 'We never say "you can't do that" and we try to be as adaptable and innovative to reach the students' aspirations and expectations as much as possible. But we are also realistic.' He added that the video productions used the standard video workflow but the advance productions tended to be originated on film and then continued to a Digital Intermediate (DI) process. The main problem for the school is they don't own a quality film scanner and depend on out-of-house scanning facilities. Once scanned, the files were usually DPX, 10-bit, 4:4:4 Cineon calibrated Log and almost 2K resolution (1920x1080). The server storage at the NFTS is up to 20 TB. Local storage is between 3 and 8 TB. This approach is a cost-effective simulation of industry standard workflows and the results are of a high quality. The school gets much help and support from industry partners and friends and their policy obviously works as the magazine Broadcast lists the NFTS as the 18th best equipped postproduction facility in the UK. So we ended with a vital secret for getting the highest possible quality at the lowest possible cost - beg, borrow and ask for favours.

The conference was important and stimulating and the delegates expressed much gratitude for the careful and inspired planning by Marieke Schoenmakers, Hanneke Bloemendal, Marc Tiemissen, Kris Dekkers and others from the NFTA in cooperation with Tore Maritvold from the NFS and Nik Powell and Jon Houchin from the NFTS.

Having shared the technical secrets, NFTA team also transported the delegates to an evening of *gezelligheid* by means of a canal trip to distinctive Lloyd Hotel for drinks and dinner. It was a wonderful evening of friendship without secrets. What's *gezelligheid* then? It's a Dutch state of being and a secret to be revealed at another conference, or you'll just have to travel to Amsterdam to find it.

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