

No Mean Feet

Eric Whipp, head colorist for animated movie *Happy Feet*, talks about the grading challenges and Film Master.

By Danny Chan

Colors are just about the last thing you'd associate with a bunch of penguins set against snow and ice. Yet that was exactly what colorist Eric Whipp had to invoke for audiences around the world, when he took on the task of grading animated feature *Happy Feet*.

Having just joined Animal Logic as head colorist, Whipp was about four months into his new job when he started work on the movie – at the production company located at Australia's Fox Studios in downtown Sydney. Animal Logic specializes in visual effects, animation and design for the film, television and advertising industries.

The first fully animated feature produced in Australia, *Happy Feet* is the bold answer to the likes of Pixar and Disney from Down Under. Helmed by none other than George Miller, better known for the international success of his earlier works, like *Babe The Movie* and its sequel, *Babe: Pig in the City*, *Happy Feet* follows the trials and tribulations of Mumble the penguin.

The skinny on *Happy Feet*

And so it goes that in the icy cold region of Antarctica, there lived a community of Emperor Penguins who express their



Eric Whipp



true love with a 'heartsong' of their own. In this communal world dominated by webbed-feet songbirds, it is no wonder that Mumble is such a misfit – he cannot sing! However, the exuberant young penguin possesses an uncanny ability for tap dancing, which eventually lends itself as an outlet for the little one's expression. Nonetheless, when the deeply conformist colony suffers from a drought of fish, which threatens their very livelihoods, the other penguins begin to blame the situation on Mumble's unorthodox dancing. The movie, which obviously champions the rights of underdogs to freedom of expression, then takes the beaten path as Mumble and his buddies uncover the truth behind the famine, and save the day for the entire colony – by, what else, but tap dancing.

Treat it like live action

Since the film is set entirely on ice and snow, the team at Animal Logic had a few trials of their own to overcome. The team's priority was to achieve a vibrant, colorful look by ensuring accurate, crisp detail in the 'whites' and 'blacks' of the penguins. Rather than approaching the film as a traditional animated project, Animal Logic treated it like live action. Whipp comments:

"It was clear with so many composers working on *Happy Feet* that there was a need for a final colour grade and DI. I decided to simply treat the film as if it was a live action film."

He adds: "All the things you do in a live action film such as vignettes, and keys and little spots of light, were all used in the grade as well as other effects, like blurs, diffusion, sharpening etc. George Miller, the director, was able to sit in real time and grade the film to get the required look. Without the Film Master, that process may have taken longer, or have been put in the 'too hard – not enough time' basket at the compositing/lighting stage."

Whipp was referring to the Nucoda Film Master from DigitalVision, a developer of digital media applications specializing in film and video solutions.

Like any film, there were shots that didn't match very well, shots that were too bright and even scenes that could be improved. Despite the run-of-mill issues, Whipp's initial assessment of the grading process consisting of a relatively simple color balance soon gave way to a gargantuan undertaking.

Controlling the contrast

According to Whipp, about 70 per cent

of the film is set on snow and ice. "There are a lot of white and dark black penguins to deal with. The challenge was to keep a certain photo-realistic feel, while also trying to create a vibrant colour palette."

He reveals: "There's a lot of rich cyan and blue tones inherent in the film, but it's how you control the contrast that really makes the difference. Then of course, there's the translation to film print. We became very aware that red or magenta biased prints were not helping us (in a world of cold ice), so we would often grade a scene a touch cooler in case we got a red print, and if we got a blue or cyan print, it was still acceptable to the eye."

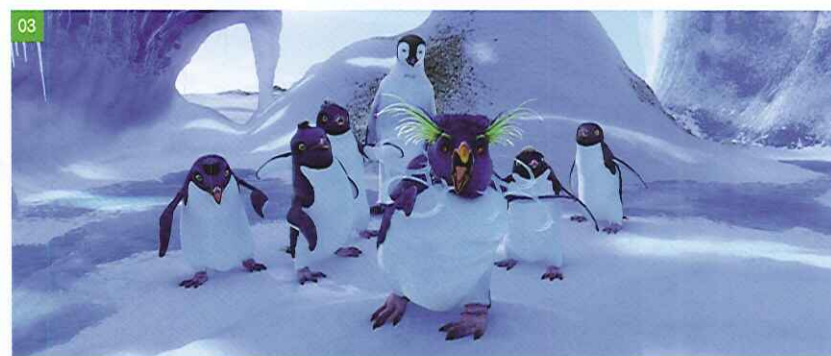
For Whipp, the biggest challenge was to get the highly contrasting images – naturally contrasting due to the amount of white ice and black penguins – to look great on film.

"If you pushed your white levels just a touch too far, the image would not look good on film. A lot of work went into trying to create a very natural filmic looking image, and retain detail in the extremes."

Workflow issues proved just as problematic. Since the movie was composited in linear colour space, the images needed to be converted to LOG



01-03: Colorist Eric Whipp approached the grading project for *Happy Feet* as he would a live action film.



colour space to be graded in LOG, during the DI process.

"Often there would be issues with colours not 100 per cent mapping where we wanted them, so a bit of trickery and hard work went on to try and get an accurate conversion."

The Master at work

Adding to the grading challenge on *Happy Feet* is that Mumble is grey, which made the basic balance of a shot very complicated.

Once grading had begun on the first scene, the team realized quickly that the original compositing mattes would be very helpful – especially with a film set against white snow and ice, and a grey-colored main character, all a very difficult range of colours to key or grade. One of the advantages of generating the visual elements digitally is that there would always be the original element to be referenced against.

"For this reason, we delved into the original compositing mattes for the grade," Whipp notes. "In the end, we used over 2000 mattes in the grading process, right down to individual character mattes, eye iris mattes and eye white mattes."

"Being able to separate and isolate elements of a shot was crucial to the grading process of this film and we were able to produce and correct in the grade in a matter of minutes and not weeks."

Whipp was once again attesting to the functional qualities of the Film Master. Animal Logic has been a Digital Vision customer for two years and were originally going to use the company's Data Conform product for handling daily reviews. However when the grading requirements of the feature were identified, it became a natural step up to purchase a full-featured Film Master system.

"I hadn't actually used the (Film Master) system before I started on the film, so I had a one-day crash course and jumped into the deep end. In the end, I pushed the system to the 'max.' I also spent a lot of time getting to know the film and understand the context of each scene. We also did a number of film-out tests to ensure that what we saw on the digital projector is what we got on the film projector."

Commenting on the learning curve of the newly acquired system, Whipp



01-02: Balancing the color grades for grey-colored Mumble was a challenge.



Film Master Suite

attests: "The Nucoda Film Master works very similar to the way Adobe Photoshop does in the sense that you can simply add layers and reorder them with a mouse click. Using the mattes and ordering layers around were crucial to the grading process, and the Nucoda handled that well."

Whipp further complimented the

third-party plug-ins for the Film Master, which proved essential in the process. The plug-in options came in handy when Whipp was tying the shots together.

"For example, sometimes I'd find that I just needed a tiny bit of lens blur in the foreground to help the cut. Or underwater footage that needed a bit of diffusion to help with the underwater look."

Teamwork works!

On the smooth creative process, Whipp says it was largely collaborative and down to good teamwork:

"Our Director George Miller spent quite a bit of time in the theatre grading the film. We would discuss scenes and try different looks until we felt we had the right look. Then, typically I would work on the scene while he went away and did other things – such as the audio mix, or animation reviews, etc. With so many lighting and compositing people, it goes beyond just working with the DOP as such. What we did have were sessions with the Layout leads, the Art Director, Producer, Lighting Leads and the Director and together we would work on ideas and styles."

Feel the colors

Happy Feet opened for theatrical release worldwide in November, causing quite a stir – both turning in rave reviews and peaking performance at the box-office. Few moviegoers, however, would attribute its success to the likes of Whipp and others who toil behind the scenes to make every single shot count. For Whipp and company – as it should be for the millions who caught the animation blockbuster – the artistic value of the film extends beyond mere visuals; but encompasses visceral aesthetics. This is akin to what directors refer to as "colors that you feel but do not see". Whipp explains this phenomenon:

"Quite often you watch a film and it looks great – the story is great, the actors are great – but there is something wrong that you can't quite pinpoint. Sometimes it's simply the look that is not quite right. You do have to 'feel' colours and looks. Many times during *Happy Feet*, I would be working on a scene for hours, but I would have a feeling that the look was not quite right. I would step back, examine the concept and feel of the scene and approach the grade in a slightly different way. Suddenly the look felt right."

Today, the head colorist has every reason to take pride in his work – now that work revolves around collaborating on international blockbusters the size and scale of *Happy Feet*, not to mention a constant supply of big-budgeted TVC projects. Not bad for someone who "stumbled upon color grading".

Whipp started off as a telecine colorist doing dailies for TV shows such as *Flipper*. He soon found himself dabbling in commercial grading while working on long-form projects, and eventually moved to commercial grading full time. He recently decided to make the switch back to features, in particular DI work. Calling his job "the perfect marriage between post and production", Whipp is one of those lucky guys who gets to enjoy what they do for a living. And any self-respecting creative would have you know, they make a difference. With regards to being a colorist, perhaps Whipp says it best:

"Grading animation is essentially the same as grading live action. It's all about the story. The colour and look of a scene can help tell the story, and it's the job of the colorist to ensure that every shot flows and helps create the right mood for the scene." ♦

