



ow on DVD comes a kung fu story with a difference. Not Kungfu Panda but Prevalent Entertainment's animated feature film 'The Prodigy' by writer and director Robert D. Hanna, which has been released on DVD this year. It is about Kung Fu Girl KG who is adept at learning kung fu from a young age and who discovers her strengths when she starts to believe in herself. Being an exceptional champion, she uses her skills to restore justice to her beautiful kingdom and rescue her beloved Prince Po.

Hanna says, "When I wrote the story, I wanted to develop a girl in power. A hero that the young ladies could identify with and the young men could admire. I wanted her to be a very likeable underdog who overcomes all the obstacles and transcends; finding power that has eluded her. I also wanted to develop her sensitive side with a strong romance full of love, to compliment her powerful side." The film is set in ancient China and involves stylized kung fu fight sequences. To give the film a realistic look of the time and period and location where the film is set, an in-depth study of Chinese culture; Kung Fu styles, wardrobe, architecture, musical styles, musical instruments, geography and earth topography of the region was done. The extensive pre-

production planning was implemented by leading animators of the Hollywood industry like former Disney and DreamWorks artists. David Krentz, Steven Gordon, David Lowery and Craig Elliott. Hanna says, "Working with David Colman, an Emmy award-winning character designer, was critical in getting the appeallook of characters. Top industry storyboard artists like David Lowery and Steven Gordon brought the story to life from the page and made it a visual realization. These preproduction

designs

were closely followed to create the CG characters, sets, and props in the 3D animation realm."

The first step in bringing the story to life was writing of the script in its basic form.

Then choreographing the kung fu movements and categorizing these movements with movement numbers M1 through M64. These movements were then integrated into the script pages. Reference videos were created for each movement from live action taping (and later by rendering the character rig with motion capture animation) followed by creating orthographics, Animation action charts, and character Attitude charts. Craig Elliott, production designer of the film, who has earlier worked on films like Shark Tale and Bee Movie played an instrumental role in creating the look of the film, the set and locations. Elliott's original drawings where he created Panda Town and Prince Po's castle were used in the film. The biggest challenge for Elliott was to use existing models of Asian buildings,

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monuments, statues and other props and build them together in a visual and interesting way. His designs served as a blueprint, which made it an important map for the computer modelers to follow. The character designs were then established with the approval and improvements and coordinating story board artists to use the new designs for their story board sequences. The story boards were then digitized into the Avid story reel. Creating a visual story board for the film was 'The Prodigy' producer Lowery's task.

The next task was to lay out the temp music, sound effects, and record the voice over performances into the reel and then finalize the story and reel. The CG characters and sets were then modeled using Colman's orthographics, and facial morphs from the Attitude charts were created. Combining the animal drawing skills with the character designs, understanding the animals by their shapes and how they move and interact, and the facial character traits along with the pattern and texture helped Colman to directly move to the design. Studying the animals from real life, the animal character designs were a lot more successful, developing a connection with the audience. Colman believes that an appealing character is based on design, especially in the shapes.

He tries to use a lot more organic shapes in 'The Prodigy' as organic seems to be more appealing to the eye. As a character designer Colman likes to get into the head of the writer or creator to figure out what they identify with the character for the visual manifestation of the written inscription and create a complete design. Colman says, "I enjoyed getting to create original characters not just the opportunity to be part of the project from an origination perspective but also the variation amongst the characters — the main character, the villains and the sidekicks — allowing me to create heroes, cynical henchmen and evil masterminds along with the cute and cuddly Panda character. It was also great to work

Ron Smorynski, Head of Animation, was responsible for moving the character rig and making the

with so many other talented artists."

acter walk, talk, run, and move about in their world. All shots and scenes were tracked from complexity reports via tracking sheet and every sequence was animated. Tracking sheet is shared by all and subject to director approval and constant scrutiny. Shots that require layering with special effects and compositing were separated. Approved renders were imported into AVID to replace the preliminary story board clips. Hanna says, "Tricky moments occurred while trying to achieve a beautiful look through proper lighting and texturing of the CG models. We also strived to improve the character animation so

that it would flow naturally and have the right power and impact." He admits that one of the most difficult scenes was the Dirtsurfing sequence where KG and Master Panda ride down steep hills on a

surf board type vehicle that runs on wheels. He says, "It was challenging to integrate

particle emmiters that would deliver a trail of dust. Modeling the hillsides also required extensive effort, as well as the placement of over 8 different cameras to catch all the action from a variety of angles."

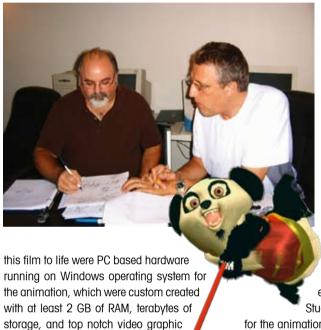
One of the noteworthy scenes in the film is the Oriel Waterfall scene with Lowery's illustration, sets and the storyboard scenes modeled by Smorynski and Hanna creating the animatic for this scene. "I love the sequence in Panda Town, when KG and Master Panda must battle Princess Mei and Lee. It presents the best variety of Kung Fu action, slapstick humour, funny dialogue, and witty comedy in the film," says Hanna. Challenges were faced when it came to working under pressure with tight deadlines, streamlining and improving the production pipeline all along the way. Hanna says, "It was tough to watch dailies or renders and find flickering texture maps, dark shadows, colour drop outs, clothing and meshes colliding. We were diligent to always go back and perform constant fixes of intricate little visual details."

Hanna's roots lie in songwriting and musical production using Logic Audio and Pro Tools and currently he has placed hundreds of songs in US film and TV annually. He says, "One of the most advantageous aspects of Prevalent is that I can wear so many hats,



and I composed custom tracks to fit every scene of the film. Some songs had already been recorded and were integrated, but most of the musical pieces were composed and recorded to fit each sequence exactly. It took a lot of time to acquire samples and sounds of traditional Asian instruments like the Pipa, the Erhu, the Chinese drum and flute, and more. I integrated these wonderful instruments with a Western sound, often combining contemporary rhythms with the Asian musical flavour." The software and hardware used in bringing







cards. Extensive render farms of similar computers were configured and 3D Studio Max was primarily used

for the animation with Combustion and After

Effects as well with Photoshop CS, XnView, and Total Commander. For the music production MacIntosh was used with Logic Audio, Pro Tools, and Reason software.

During the film's maximum operational phase, there were 30 people working on the project which was scaled back later and the duration of the film was slowly built up to 77 minutes. The pre-production phase was three months, the first phase of animation was five months, and the final output of the animation was

seven months with a smaller crew.

Although the film is released only on DVD at present, there are plans to setup broadcast through network TV and IPTV.

Hanna loved creating the realm and mythology of this narrative, and has also written the script for the sequel called 'Trials of the Prodigy' and is looking forward to an opportunity to take this animation to the next higher level, and bring this story to fruition so that it will become a franchise and provide fulfillment and resolution to the lives of each character in 'The Prodigy'.

Hanna finds it rewarding to see the story of 'The Prodigy' come to life as he says, "Creating this film has been one of the hugest challenges in my life, yet has been the most rewarding and dear-to-my-heart adventure one could ask for."