



Synopsis

Happy Planet is an animated short film about the humbling beauty of life on Earth. The environment is deteriorating because of man's irresponsibility towards other life forms. Human greed has endangered the environment by polluting land, air and water. Without directly insinuating at human greed, the film highlights the beauty of the subject of our apathy.

The film begins with a dinosaur coming to life as it is being created out of clay by an artist's hand. This opening sequence ends with a surprise peck, which sets the tone for the film. From then on, it is one uncut flow of vibrant life forms on earth. The film eliminates dialogue and communicates with its visuals and music. These visuals and the movement within them blend seamlessly, alluding to the connected life all of us share. Just as in the beginning, the hand appears once again at the end of the film - this time to request us to be responsible and protect our environment.

The Beginning

The film Happy Planet was executed in the course of an animation workshop at Tata Interactive System. During the month-long workshop, 18 in-house animators participated for a day or two, as per the requirement of the shot they were to execute. It was decided to make a film using clay animation (stop motion), but in 2D embossed style animating on white paper. The challenge - apart from maintaining a uniform style throughout the film despite so many animators working on the project - was to create a 3D feel within the film.

While using stop motion, generally three dimensional puppets are animated frame by frame on a miniature set. These frames are then captured in a computer or on a film using special capture software. Puppets have an aluminum wire skeleton to ensure they stay in the same position once the animator places them suitably. Animators need to have a strong sense of timing, excellent animation skills and thorough technical knowledge to move the puppets as it is progressive animation and one can't add any in-between frames to correct an error.

Since we had a vast subject to deal with, we thought of making a collage of nature's beauty. All the participants were asked to come up with different ideas in the visual form. These storyboards were then put together to narrate a story. We tried to make an interesting transition between each shot, considering the visual similarities, story connectivity, composition, colours etc.



Modelling

Each artist had to create the models for his shot. Characters were created in 2D embossed style with an illusion of 3D.



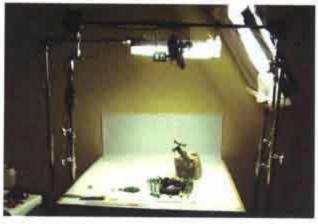


Exploiting the clay medium to the fullest, tools like bullpen's cape, knife, sculpting tools etc were used to add texturing details to the models.

Creating in-between shapes of the models was quite a challenge. Dolphins morph into birds during a shot for instance, and we created in-between shapes of the models and replaced them while animating. Objects of daily use were used to lend authentic touches to the models. E.g., Cod-liver oil capsules became tiger's eyes, plastic glue and lubricant jelly helped create water ripples etc.

Camera and Lighting

The camera and lighting was done by cinematographer Satya Prakash Rath. We had a very simple table top camera set-up. Mini DV Camera was mounted on a special stand



and four tube lights was arranged from the ceiling and sideways. We did not want strong shadows as that would give the film a 2D look. At the same time, we had to add depth to the scenes that had flat lighting. E.g., the mountains we had created looked very flat. We had to sculpt a lot to give them a 3D look.

Animation

All the animators aimed to animate at least 10 seconds per day. Some of them observed animal videos before shooting their portions, while others created thumbnail animation sketches for reference.





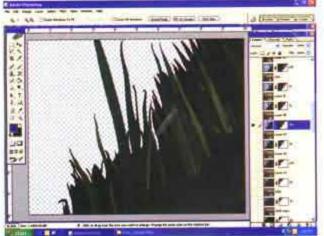
Since we were using white photo paper as background throughout the film, we could change the space around the character easily. One moment a character would be in the air, in the next moment the white space around it would turn into water. Likewise, characters could appear to be big or small and also give an illusion of distance (like the butterfly does in the film).

Since we did not want to have any cuts in the film, we used transitions like morphs, camera pan, objects appearing and disappearing, camera following characters to present a new scene, zooming in and out etc. Since the camera was still, we moved the characters and background to create the illusion of camera movement. We used Monkey Jam stop motion software (downloadable for free from the Internet) to shoot the film.

Compositing

Some of the last shots were animated separately and composed using Photoshop and After Effects software. It was difficult to move a group of penguins climbing uphill. We shot four









penguins in one frame against a hilly background, took a close up of the mother and kid penguin separately, removed white space in Photoshop and then composed all the frames in one shot. Multiple penguins were created in After Effects software.

Once we had the rough cut of the film ready, our in-house music composer started working on various music tracks and sound effects. It was finalised after a lot of improvements.

Colour correction and final edit

Since the film was shot through a period of one month, colour correction was a must thanks to changes in temperature and light conditions. Tata Elxsi's Visual Computing Labs worked on colour correction and final edit free of cost on seeing the film. Light flickers were removed using professional software and colours were improved significantly.

(Happy Planet was executed by Tata Interactive Systems, a pioneer in e-learning that has created custom workforce performance solutions for more than 350 blue-chip corporations, educational institutions and government bodies worldwide).