

## MUNE

### *Directors' notes*

When I was thinking up this story of the Guardians of the Sun and the Moon, I imagined seeing the awestruck face of a child discovering the mystery of how night follows on from day. I also wanted to raise awareness of a fairly basic ecological issue: what would be the impact on our planet if the Sun and Moon disappeared? The real challenge, however, was maintaining the project's poetic coherence without making a movie that was total fantasy. It had to appeal to the broadest possible audience by having a genuine fairytale feel without compromising on its specific identity. To preserve the project's purity while giving it a classical, accessible feel, we had to find just the right rhythm and balance between action, humor and romance.

Benoît Philippon

With *Mune*, I was aiming for a synthesis of animation classics—Disney's golden years, Miyazaki's movies, and those of Paul Grimault and Michel Ocelot. Not forgetting the modern touch of the great Pixar and DreamWorks blockbusters. *Mune* is a fabulous animated fairy tale and, at the same time, a modern 3D movie. The film combines action, adventure, emotion and humor, and possesses a dreamlike, epic dimension. *Mune* is also a movie that decisively breaks free of modern animation codes. It's especially complex since our characters are crosses between humans, animals and matter. Unlike most films whose stylization relies on 3D and whose volumes are determined by shadows and levels of grey, we used textures and matter to achieve our desires and aims.

Alexandre Heboyan

### **BENOÎT PHILIPPON (co-director)**

Writer-director Benoît Philippon is as comfortable making comedies as action-adventure movies. His debut feature *Sueurs* was a thriller produced by Samuel Hadida that brought him to the attention of independent US producer Christine Vachon and Frédérique Dumas at Orange Studio. He wrote and directed *Lullaby*, starring Forest Whitaker and Rupert Friend, before moving on to animated series and writing *Mune, the Guardian of the Moon* in collaboration with Jérôme Fansten. He co-directs *Mune* with Alexandre Heboyan.

#### **What were the origins of this project?**

Initially, *Mune, the Guardian of the Moon* was intended as a Terry Gilliam-style live-action short. When I was starting out as a writer, I thought up a character who took the Moon down from the sky with a harpoon and rope. I soon came to realize that it was totally unfeasible for a short. Animation, however, opened up a realm of possibilities and stimulated my imagination. I eventually dreamed up an organic world around the Moon and the Sun, and the characters fell into place.

#### **Did the scriptwriting process and the film's aesthetic codes inform each other?**

Absolutely. At first, I drew up a kind of cosmogony of the film, including characters, locations, characteristics of the planet where the action takes place, explanations of the reduced size of the Sun and Moon... I also found the film's premise—setting off to find the Sun, like a kind of quest for the Holy Grail. Then, character designer Nicolas Marlet and art director Aurélien Prédal came on board. It was during the visual development stage that we came up with the idea of the moving temples, so the graphic design and storyboard clearly influenced the plotting, and altered narrative devices and what was at stake dramatically. We gradually honed the script down until it was ready.

#### **How did you develop the characters?**

Each character was given a specific organic identity corresponding to an environmental element: with his downy fur, Mune is a creature of the forest; Glim is made of wax, melts in the sun and freezes at night; Sohone is a mineral character, made of indestructible amber. When that was established, the plot and characters' individual arcs slotted into place: if Mune takes the Moon out of the sky, there must be a

baddie who is after the Sun, so day and night team up to retrieve the luminous star. I have always liked the idea of opposites joining forces for the same cause. Their adventure allows the characters to develop. Mune is innocent and gullible at the start, but gradually embraces the responsibility that comes with his powers and matures into a great Guardian of the Moon.

Glim's situation, which I find particularly touching and is a recurrent theme in my projects, is that of a "disabled" character: being made of wax, she is very fragile but, with her bravery and pluck, she proves to be one of the strongest characters in the movie. In fact, she saves the sun. I like this idea of totally transcending yourself. Sohone, on the other hand, is the total opposite of Mune and Glim. I wanted him to be an arrogant giant and blowhard.

#### **What were your sources of inspiration?**

I like drawing from a variety of different worlds. For example, the inspiration for Mune is Edward Scissorhands, a fantastical, poetic character, who doesn't say much but provokes universal empathy when he finds himself in a world whose codes he does not understand. We also drew on Spiderman a little—the reluctant teen hero discovering his powers and astonishing arachnid agility. For Sohone, I had in mind Buzz Lightyear from *Toy Story* and Han Solo.

#### **Tell us about the forces of evil.**

For the characters from the darkness, I wondered how to represent Evil and decided I wanted to do it with lava. I'm fascinated by underwater volcanic eruptions, with lava solidifying after each eruption. So Necross is a volcano that erupts when he's angry. He has a pretty obvious Darth Vader side to him. Likewise, his demon minions Mox and Spleen are tiny volcanoes. Mox is constantly angry, like cartoon character Joe Dalton, while Spleen isn't comfortable in his own skin because he truly doesn't like being bad. Aurélien Prédal did some amazing research on textures and Nico Marlet came up with a wonderful idea for Spleen, depicting him as a huge rock with arms dangling at his side, dragging his knuckles and leaving a trail of soot behind him.

#### **And Phospho?**

It occurred to me that there was a world whose light source was not the Sun or Moon: the subaquatic universe inhabited by amazing phosphorescent creatures. So we imagined a sort of phosphorescent dragon who'd shine in a world of darkness. Phospho became our Obi-Wan Kenobi, although we wanted to avoid the cliché of the wise elder talking to people with clunky sophistication from the lofty heights of his ivory tower. We made the character funkier by giving him a Captain Haddock twist, with bulging eyes, peggy teeth and a real potty mouth. Phospho is an awe-inspiring dragon, with a bum's face and the language of a drunk Irish sailor!

#### **What was it like working with Alexandre Heboyan?**

I already knew him. He was working on *Kung Fu Panda* in L.A. and I asked him to join me in France to co-direct *Mune, the Guardian of the Moon*. He deserves extra credit because he was entering a world that wasn't his own, even though he adapted very fast. Seeing as I can't draw to save my life and this project involved a very complex visual environment with huge conceptual potential, Alexandre and I bounced loads of ideas off each other, and then continued in the same vein with the various key individuals at each stage—co-writer, art director, storyboarder, editor, composer. The advantage is, there were always three of us thinking and brainstorming. We never signed off on an idea until we all agreed, because if we couldn't convince one of the team, what chance would we have with the audience? Eventually, Alexandre and I reached a point where communication wasn't necessary. We were on exactly the same wavelength.

## **ALEXANDRE HEBOYAN (co-director)**

A graduate of the prestigious Gobelins art school, Alexandre Heboyan's directorial debut in animated film, *La Migration Bigoudenn*, garnered multiple prizes (Siggraph Jury Prize, Canal+ Award at Emagiciens, Ars Electronica Prize, etc). He started out as an animator on Michel Ocelot's *Azur et Asmar*, before being headhunted by DreamWorks to animate *Kung Fu Panda* and *Monsters Vs. Aliens*. Driven by his desire to direct, Alexandre moved back to France to co-direct *Mune, the Guardian of the Moon* with Benoît Philippon.

### **What appealed to you about Benoît Philippon's project?**

I liked his original take on the fairy tale, combining poetry, adventure and humor in a way I really related to. Even the early drafts contained the gems that are in the movie today. Benoît had already refined the character of Mune, for example, describing him as, "a big-eared fellow with fawn-like fur, only blue." All the poetical situations—Mune holding the moon, Mune sculpting Glim, Sohone on his temple, etc—were already there. Obviously, we spent a long time researching and designing thereafter, but the film had very solid foundations.

### **What was it like co-directing?**

With Benoît being a live-action writer-director while my background is in animation, it was very stimulating. First up, we had long conversations just to be sure the project fitted the animation bill, then we developed the characters and some situations with co-writer Jérôme Fansten, so the story was up to speed. We constantly tossed ideas back and forth, and Benoît even got involved on the storyboard and developing the design bible.

### **Did your experience in the USA at DreamWorks benefit the movie?**

At DreamWorks, up to 300 people would be working on the same movie, each with their specific skills and a precise job to do within a highly organized whole. I really learned the meaning of teamwork there—communicating, sharing information, opening up a major artistic project. On *Mune*, there were 150 of us working together, so my experience of a major US studio was priceless.

### **At DreamWorks, you met Nicolas Marlet, who joined the *Mune* project at a very early stage.**

Precisely. Nicolas is one of the best character designers working in animation today, with credits such as *Shark Tale*, *Over the Hedge*, *How To Train Your Dragon* and *Kung Fu Panda*. As soon as I told him about *Mune*, he said he wanted to design our characters! It was amazing, one of the greatest artists in animation offering right off the bat to work with us. All the characters have the Marlet touch, especially Mune, with his slender figure, blue tint, big ears and legs. Nicolas was the first fairy godmother to sprinkle a little magic dust on the movie.

### **How did you design the film's various environments?**

We played on oppositions between the worlds of day and night. The world of day is seen as a civilized world where the population gets scared as soon as the sun falters. In our night environment, we have tribal peoples living with plants. To distinguish them, we attributed strong chromatic codes to each of them. And let's not forget the underworld, the lair of titan Necross at the center of the planet, in shades of red and orange, with a very geometrical design that contrasts with the gentle, sweeping forms of the forest. As for the Temple of the Moon, it's curvaceous, like a cocoon, whereas the Temple of the Sun brings to mind a gigantic cathedral of light.

### **Visually, the film is unique.**

The idea was to create a 3D environment that would stand out from US productions, especially Pixar, which has established visual standards over the last 15 years that we are all familiar with, through *Toy Story*, *The Incredibles* and *Finding Nemo*. Sure, it's a magnificent computer-generated three-dimensional image but we were keen to "rage against the machine" creatively and come up with a design that showcased texture and color—artist-driven not computer-controlled. We did a huge amount of research on matter, exploring Glim's translucent dimension, the warm, orangey tints of amber, and the mineral blackness of volcanic rock juxtaposed with molten lava.

### **How did you organize production between Paris and Montreal?**

Project development and the design of characters and sets took place in Paris over about 18 months, while the actual fabrication of the picture was done in Canada. The Montreal heads of department, such as CG supervisor Jonathan Germain and layout supervisor Stéphane Stoll, came to Paris so we could ensure we were all on the same page technically and artistically. Then I went to Montreal to work with Stéphane on the layout and with Sébastien Bruneau, our animation supervisor. The Montreal team was headed up by Jonathan Germain, who was responsible for transposing our vision into 3D using rendering and lighting techniques. These technical stages were all crucial to obtaining that unique look in the finished film.

### **Even though it is a fairy tale, the film is often funny.**

For the humor to come out, you need to give the artists room to express themselves within a set framework. I always encouraged them to go for the gag, and that's how our designers and animators injected their own sense of humor into the characters from the outset. For example, the former Guardian of the Sun, Xolal, is a sort of wrinkly prune who trembles uncontrollably. When you come up with a character who falls over his own feet, clearly comedy isn't very far away. The little spiders that weave the Moon to the harp are also comedic characters, in their expressions and sheer numbers. We also played on conflicts of personalities to create absurd and, therefore, funny situations. Angry Mox and depressive Spleen, the two minions, form an extremely comedic duo. Sohone's arrogance, expecting "the ladies" to fall at his feet, contrasts with Mune's introverted shyness.

### **What does 3D add to the movie?**

Seeing as the film tells the story of a great journey between Sun and Moon, via the land of dreams and the underworld, we wanted to use 3D to transpose the "solar" world: I wanted real depth for shots of the Temple of the Sun against a landscape of rice fields or for the scenes where Glim comes back to life, for example. Here, 3D lends greater volume to the picture. On the other hand, in the world of night, devoid of life, there is much less space, and so the 3D emphasizes the contrast between those two environments. We also used 3D for the underworld, where we obviously needed a sense of depth. When Necross attacks Sohone, you really sense all the space around them. Thanks to 3D, the environment of the film seems much more vast.

### **Conversely, the dream sequences are in 2D. Why?**

The dreams and nightmares sketch the outlines of an offbeat parallel world where the characters run into weird and wonderful creatures. We wanted to distinguish it from the rest of the movie and so we opted for a graphics-based 2D style that I was very familiar with from the traditional animation I often used at film school. We called in La Cachette, a small Parisian studio that is a collective of talents from the same school and they hand-drew teeming sets and characters that they animated frame-by-frame.

### **What were the major difficulties you encountered?**

Primarily, the abundance of matter and texture that demanded considerable research and development in 3D as, for example, when light shines through wax, or makes Mune's fur shimmer, or when you can see his fur moving under water. And then, our characters operate on several different levels. On the one hand, our heroes have a broad palette of realistic facial expressions—hurt, happy, contemplative, skeptical, envious, jealous, etc. On the other hand, we have pure cartoon characters, such as the little demons, whose sole purpose is to make people laugh. And finally there are very stylized characters, such as Phospho, who is halfway between the two extremes. For all of them to fit together, our art directors had to work on the overall harmony of the picture so that it had the same DNA whatever the environment on screen. Last but not least, variations in scale presented a huge challenge. We have miniscule spiders and tiny ants alongside the Temples, which are huge stone creatures standing over 300 meters tall. The practicalities were extremely difficult to resolve and we ended up defining different technical codes per scale of character.

## **ATON SOUMACHE (producer)**

After graduating from Sciences-Po Paris, Aton Soumache set up his first production company, Onyx Films, at the age of 25, with the intention of making visually ambitious and technologically innovative movies. He has produced around fifteen features aimed at an international market, such as *Renaissance* (Best First Feature at the Annecy Festival), *The Prodigies*, *Upside Down*, starring Kirsten Dunst and Jim Sturgess, and *The Little Prince* by Mark Osborne, which he coproduced with Dimitri Rassam and Alexis Vonarb. In 1998, Aton Soumache and Alexis Vonarb founded Method Animation, which has produced around 200 hours of animated TV content in 15 years and is the second largest producer of animated series in France, with sales all over the world. Method Animation is now considered one of the most important independent producers of animated series in Europe. Both production companies are now part of ON Entertainment Group, founded by Aton Soumache and Dimitri Rassam in 2013.

### **What appealed to you in Benoît Philippon's project?**

From the very first draft of the script, it was packed with imagination as Benoît magically revisited the mythology of the Sun and Moon. It was also a beautiful, poetical metaphor to open up a children's fairy tale that touches on essential themes, such as the stars, magic and the mystery of the night, the beauty of the Sun and the power of its light. Benoît had created a superbly written environment with characters created from scratch. We used it as a launchpad to find talents and artists who would deploy their distinctive skills and flair to bring *Mune* into the world. That was seven years ago.

### **What were the main challenges you faced?**

In a sector that is dominated by giants such as Pixar, DreamWorks and Fox, you have to fight for the right to branch out and create an original piece of work with real range and ambition. Even more so when you're European. With *Mune, the Guardian of the Moon*, we wanted to be there for our two young directors and enable them to make an ambitious movie with genuine international potential. Inspired by the great Disney classics, Miyazaki's masterpieces and the European tradition, *Mune, the Guardian of the Moon* was an exceptional project from the outset. We were lucky to have backers such as Frédérique Dumas at Orange Studio and Grégoire Melin at Kinology, who came on board at a very early stage and whose belief in the project allowed us to achieve our original vision.

### **How did the crew come together?**

To complement Benoît Philippon, we needed a talent with a background in animation. Someone who knew all the tricks, be they technical or poetical. After training at Gobelins art school and cutting his teeth in French animation, Alexandre Heboyan made a magnificent short, *La Migration Bigoudenn*, and landed a job at DreamWorks. He fell in love at first sight with the world of *Mune* and was keen to join the adventure. Other talents came on board, including Nicolas Marlet, one of the best character designers in the world, Aurélien Prédal, a fantastic artist and production designer now working at Aardman, and Hidetaka Yosumi, who was responsible for our characters' facial expressions. We also benefitted from the support of Mark Osborne, director of *The Little Prince*, and Glen Keane, a Disney legend who made some very pertinent remarks on the visual environments and characters. They were both there for Benoît and Alexandre throughout this adventure.

### **Bruno Coulais composed the score.**

Once again, it was our great fortune that a talent such as Bruno Coulais should fall in love with the movie. His original score is unbelievable, recorded in London with a philharmonic orchestra, magnificently combining the voices, choirs and instruments. The music is a crucial part of the movie. Bruno infuses it with formidable sensitivity and punctuates the visual poetry of the pictures with an epic score.

RÉMI SALMON (art director)

### **You were Art Director on *Mune*. What does that role involve exactly?**

First, I had to understand and appropriate what the directors had in mind, so I could transpose it into pictures and enable the whole crew to share that understanding. That involves producing images that

serve as a design bible for the artists. Then we transferred those designs, which often worked fine in 2D on paper, to 3D. As there are an infinite number of ways to do this, I was constantly with the artists, resolving technical issues.

#### **How did you go about defining the movie's visual style?**

It's a unique environment. We didn't want to stumble into realism or cartoonery, so we adopted a graphical approach to defining form and colors. We focused on the silhouettes, keeping them simple and coherent so that the audience deciphers the image as fast as possible. The idea is to avoid overloading the image with information. For example, we always counterbalanced realistic textures with flat tints.

#### **Were the characters already highly defined when the directors contacted you?**

From the get-go, each character was identifiable through its matter. Some already existed and others were designed later as the script evolved. We wondered how best to integrate them with the rest of the characters in order to preserve the overall visual coherence. I put together a color script that gives a very precise idea early in the process of the colors, mood and emotions of the rendered image. That's how we realized that in successive shots we went from day to night and back again, which naturally had a decisive influence on the lighting of the movie.

#### **What did you aim for in the representation of natural elements?**

We used techniques that verge on 2D in terms of cutting to the chase. We didn't try to achieve water that is realistic with reflections and ripples, but a simple form of abstraction. Likewise, we didn't go for realistic, simmering lava, but minimalist matter that makes us realize it is lava, counterbalancing the greater detail, volume and texture of the nearby rock.

### **OLIVIER RAKOTO (head of studio and animation producer)**

#### **What was your contribution to the making of the film?**

From the start, the studio's aim was to provide the best in current and upcoming technology for productions that cannot single-handedly afford such technology. This gives the directors artistic flexibility and allows them to develop their story and visual style as far as feasibly possible in order to compete in quality with international productions. By putting substantial resources into research and development, we have created and developed tools for artists that are easy to use and allow them to express a movie's complete creative potential. As we're independent and our budgets are limited, we put a lot of thought into targeting our financial resources so we don't sacrifice quality of animation and facial expressions. That explains the importance of tools that enable animators to worry only about animation, not technology.

#### **What were the principal challenges you faced?**

The main challenge on *Mune, the Guardian of the Moon* was its originality. We had to create a whole universe from scratch—plants, sets, lead and supporting characters, and crowds. Furthermore, our heroes' adventure takes them through various landscapes and environments, meeting all sorts of creatures. Obviously, that involved a major output of objects and characters of radically different sizes. Once again, we had to come up with processes that enabled us to handle the volume without a drop in quality.

#### **In *Mune, the Guardian of the Moon*, there's a whole swathe of dissimilar characters. Did that complicate your job?**

Not only are the characters of completely different proportions, but they are also a range of mineral, vegetable or animal, so they are expected to move differently. We managed to perfect a model for all the characters that could be adapted to each one, particularly in terms of texture: wax, fur, stone, amber... Some materials were more problematic than others. Wax, for example, needs to be felt to be transparent, with the light going through it. And just to complicate matters, Glim begins to melt when exposed to the sun and stiffens in the cold. With regard to Mune, we wanted to render his fur very soft visually, like a teddy bear's. And in terms of Sohone, amber is a mineral that shimmers, so it had to appear very warm.

#### **How did you use 3D in this movie?**

At ON Animation Studios, 3D has to be a narrative device. In *Mune, the Guardian of the Moon*, the planet is pretty small but inhabited by gigantic creatures, such as the Temples and Necross. So issues of scale between the infinitely big and the infinitesimally small make a genuine contribution to the perception of the protagonist's journey of initiation. The 3D is used to intensify our hero's emotions. Even so, it's there as an extra narrative layer not to catch the audience's eye. What matters most is proximity with the characters. As a result, we created 3D that evolves with the story. Whenever necessary, it gives way to emotion and scenes without that extra dimension because planarity is also an expression of volume.

### **JONATHAN GERMAIN (3D supervisor)**

#### **How did you light the movie's 3D environments?**

In real life, when light travels through a window or across a room, it bounces off everything and illuminates the whole physical space. In recent years, it has become possible in 3D to recreate the light beam that rebounds and goes through matter. Thanks to subsurface scattering techniques, when light makes contact with an object, it can be reflected, diffused, or penetrate the material, like when you place your hand in front of a lamp. Given that the textures are crucial in *Mune*, we had to find a way of lighting amber, wax and lava realistically.

#### **Did you encounter specific difficulties with certain textures?**

It's very rare for the main characters in an animated movie to be of such varied and distinctive composition: Mune's fur, Sohone's amber and stone, Glim's wax, Necross' lava. Each character and each material reacts differently to light. For example, if you backlight Mune, all his fur will light up, but he will remain dimly lit. Sohone is made of amber, a vitreous material, so light will simply go through him. Glim, meanwhile, will glow since the light is diffused in her wax. As for Necross, he is lit by luminous lava. In order to obtain visual harmony across these diverse characters, we had to cheat a little, so that Mune and Sohone would be visible on screen and Glim would not absorb all the light. The audience needs to be able to move from one character to the next and understand what's going on without being distracted by an imbalance between characters.

#### **What is your principal source of inspiration?**

The Fauves, an artistic movement based on color. Unlike traditional 3D animated movies that rely on volume, *Mune, the Guardian of the Moon* plays extensively on chromatic contrasts.

### **STÉPHANE STOLL (Layout supervisor)**

#### **Can you explain what being layout supervisor involves?**

The equivalent to the layout in live-action cinema is blocking a scene—determining the positions and movements of the characters, cameras and props. When you're shooting a 3D movie, I need all those ingredients in order to frame each shot. It is the stage where rhythm, pace, camera movements and focal lengths are decided.

#### **What were your priorities for the photography?**

We chose a 2.35 aspect ratio, which is a widescreen format. The two directors didn't want anything that looked like a cgi movie. I was delighted with that! As we were shooting on 2D, we gave the look of the movie an awful lot of thought: no endless crane effects; radically shortening focal length when close on a character; making sure we shot the sets from a certain angle.

#### **Can you describe the layout process?**

First came premodelization and previsualization, to make sure the digital resources fit the film's concept. At the same time, we hired a crew in Montreal—modelers, lighters and, above all, animators. I really liked the fact that we hired people who could stay with the project by moving between departments: animators with an affinity for lighting moved onto the lighting department. Likewise with modeling and so on. Layout is all about transposing the vision that has been agreed with the directors to the individual scenes.