The legendary kingdom of Mandala from “Jim Button and Luke the Engine Driver” is not as far away as you may think. You don’t have to take a plane and fly to China to get there. Instead, just take a train to Stuttgart main station, navigate your way through the maze of building sites for the new station project, then take a 15-minute walk to the complex called Bosch-Areal.

The complex is home to Mackevision, one of the world’s leading computer-generated imagery (CGI) firms. And it’s where they produce 3D visualizations, animations and high-end visual effects for images, interactive applications and films. There’s no sign here of any Asian-style architecture or splendid gardens, let alone a palace. Instead you will find the offices of Adam Wesierski, Jan Burda and David Anastácio, who were largely responsible for bringing Mandala to life.
The challenge was to breathe life into a fantasy kingdom. And they found themselves facing a problem: “Designing every house separately would have taken up too much time,” says Adam Wesierski. So they came up with a modular system including everything you need to build a house: pillars, balconies, roofs… “It was a bit like Lego,” explains David Anastácio. “We could build entirely different houses from the same set of building blocks.”

But creating animated sequences on a computer screen is one thing. Blending in the actors is quite another. In the past, they

Not that they invented the city, of course. That was master storyteller Michael Ende in his first Jim Button story. Readers of a certain age may well recall the adaptation staged by the puppeteers from Augsburger Puppenkiste. Now, 58 years after the book was originally published, a team of film makers have dared to bring the story to life using real-life actors. The film makes its debut in German cinemas on March 29. And the cast reads like a Who’s Who of German stars in a line-up including Henning Baum, Annette Frier, Uwe Ochsenknecht, Christoph Maria Herbst and Rick Kavanian, all working together in rare harmony.

It was an ambitious and above all complex project. Mandala was recreated at Filmpark Babelsberg, the desert shots were filmed in Cape Town, while the scenes in Mandala were captured in a hall against a green backdrop or ‘green screen’, as it’s known in the trade. All the rest was created in Stuttgart’s Bosch-Areal: the splendid houses with their colorful flags and lanterns, the palace and even the tiny great-grandchildren. “It was a labor of love for every one of us,” says Jan Burda. For more than a year, a team of almost 20 people worked on the project. Most of them had read the book at some point. And everyone had their own mental image of Mandala, a place of which only a single illustration exists. Maybe that’s why the film crew’s specifications read: Just do it.

So Mackevision went ahead and did it. They are no strangers to demanding film productions, having been involved in “Independence Day: Resurgence”, and “Gotthard” – and even won an Emmy (the Oscar of the television world) for the visual effects in “Game of Thrones”. But this time they weren’t dealing with ships, castles and massed ranks of soldiers.
film a scene against the backdrop of a green screen, insert it into the animation, then hurry round to the nearest church and pray that it would somehow fit. Today Mackevision can skip this final step, thanks to their partnership with nCam Technologies. Armed with an nCam, directors can merge the virtual world with the scene being filmed in real time. This way they can see at a glance how the actors need to move and behave. “It’s a massive help for all concerned,” confirms Adam Wesierski.

Then came the refinements, those little details that make the film so adorable: the mini ear-cleaners, for example; the homes of the great-grandchildren; the imaginative inscriptions above the entrance to the store; the pair of turtle doves on the roof – or the impressive ornamental dragon in the window. True, these little things are not always easy to spot. But it’s well worth trying.
Visual Effects Supervisor Juri Stanossek talks about turtle doves on the rooftops, 7,500 photos in five days, and a project that was very close to his heart.

Juri Stanossek, what would you say it takes to make a good Jim Button film?
First and foremost: courage.

You wouldn’t say it takes a great idea and the very best actors?
That too, of course. But I’d say that, at the outset, courage is the decisive factor.

What makes you say that?
Did you ever read Jim Button when you were a child or have it read to you?

Sure, like countless other kids…
And that’s just it: This is important material that many people have already visualized in their own minds. Some read the book, others watched the legendary puppet shows of the Augsburger Puppenkiste. So taking that material now and saying: OK, let’s make this a real big thing and shoot a movie with real actors – that takes courage. And passion. A whole lot of passion.

How did you feel about it?
For everyone involved here this was a labor of love. Actually, there’s no other way to make a project like this work. But we also had some superb support, not least from MFG Filmförderung, the film promotion company of our home state of Baden-Württemberg.

And what part did Mackevision play exactly?
We worked closely with the director, the set designer Matthias Müsse, and our customer’s VFX supervisor Frank Schlegel on the representation of the kingdom of Mandala – the houses, the palace and its gardens.

All computer-generated?
That’s right.

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You can’t tell when you see the film. It all looks so real…
(Laughs) Thank you. That’s the greatest compliment anyone can pay us.

How big was your team?
We had almost 20 people working on this for a whole year.

What was the biggest challenge you faced?
Living up to people’s trust. We were given incredible freedom in terms of design and implementation. Which we were delighted to have.

Do I hear a ‘but’?
But of course that implies a lot more responsibility than if you have to stick very closely to given specifications. The amount of trust invested in us was massive, and we didn’t want to disappoint anyone.

Were there technical challenges too?
Sure. The biggest question we asked ourselves was: how can we build a large number of different houses without having to design each building separately? Because we could never have done that in time.

How did you resolve that?
We used a modular system with everything you need to build a house: pillars, balconies, roofs… That way we were able to create very different-looking houses from prefabricated parts. It was a bit like Lego. And there was another big advantage in that if we modified a module, it was automatically corrected in all the existing houses. That kept us really flexible and saved masses of time.

When you look closely, you can see countless details: a pair of turtle doves on the roof, artistic inscriptions, the great-grandchildren at play, even dust on the streets.
That was something we all had a huge amount of fun with. And it’s the little details that make this film so adorable.
But surely that took up lots of time. And the little things don’t really stand out that much...
Not when they’re there, maybe, but you’d notice if they weren’t there. These are the things that you perceive at a more subconscious level. The fact is, reality is complex. And if you dispense with all the little details, the scenery soon looks cold and dead.

How did you know what it looks like in Mandala? Illustrations are few and far between.
Of course the film production company and set designer provided us with sketches and concepts up front, but in many respects we had a free hand.

So you let your imagination run wild?
Yes and no. Of course we did our research and found some inspiration. After all, we were out to imitate reality. So before we started, two of us spent five days in Beijing, studying the architecture from various periods and taking photos.

How many photos did you take?
7,500

7,500?
(Laughs) You could say our hunting instincts kicked in. After a while we couldn’t help it!

You were also on set when the film was made.
Yes, I was. It was great the way we all worked together with the Rat Pack production crew, including Producer Christian Becker, Director Dennis Gansel, Visual Effects Supervisor Frank Schlegel and cameraman Torsten Breuer, to name just a few.

How were you able to help on set?
To give you just one example, we had the nCam in operation for the first time ever. That allows the director to impose the virtual world directly onto the filmed scene in real time. That way he can tell at once what it will look like in the finished item. And that’s a great help.
What was the atmosphere like on set?
Superb. Without exception, everyone really put their heart into it – producer, make-up artists, actors, whoever. I think you get a sense of that, when you see the film.

When did you get to see it for the first time?
At the premiere in Berlin on March 18.

And how was it?
Superb. Of course we were all really keen to see how it all came together in the finished item and how it went down with the audience.

How did the audience react?
Great. Although I must admit that I soon stopped noticing how people were responding.

Why was that?
Because I was so caught up in the film. Which at the end of the day is what really counts.
Credits

Director: Dennis Gansel
Camera: Torsten Breuer
Production design: Matthias Müsse
Music: Ralf Wengenmayr
Sound: Dirk ’Teo‘ Schäfer
Costume: Ute Paffendorf
Editing: Ueli Christen
VFX Supervisor: Frank Schlegel
VFX: Scanline, Mackevision, Trixter, Rise FX, Chimney
Production: Rat Pack Filmproduktion GmbH
Co production: Malao Film Inc., Warner Bros. Entertainment GmbH

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