



# DISNEY'S

*With its new Avatar and Star Wars attractions, can Disney steal back the magic from Universal and Harry Potter?*

# GALACTIC

By **DEVIN LEONARD** and **CHRISTOPHER PALMERI**  
Photographs by **STEPHEN WILKES**

# GAMBIT

The first thing you notice when you meet Joe Rohde is his left earlobe—the one that stretches down to his jawline because it's carrying 12 hoops. He's collected them in journeys to Africa, South America, and the Himalayas, and it's gotten to the point where locals now give him unsolicited earrings, either because they like his style or want to test the limits of what Rohde refers to as his *National Geographic* ear. "It's happened with Tibetan people on a trail, Thai hill people, Masai warriors," says Rohde, a veteran executive in Walt Disney Co.'s Imagineering division, which designs theme parks. "They just hand me stuff." He shrugs.

The hoops jingle when Rohde moves, which he's doing a lot on this chilly morning in March. He points with both index fingers at a seemingly innocuous manhole cover inside Pandora: The World of Avatar, an attraction scheduled to open on May 27 in Disney's Animal Kingdom Park in Orlando. Rohde bends his knees and practically starts to shimmy as he explains that the manhole cover is no mere sewer lid, but part of an elaborate, immersive illusion. Look closely, he says. The cover is decorated with the logo of Resources Development Administration, the earth-based company that, in James Cameron's 2009 film, descends on Pandora with a squadron of mercenaries and a scheme to extract unobtainium, a valuable mineral beneath the soil of this lush moon inhabited by the blue-skinned Na'vi race.

In other words, Rohde doesn't just want you to be dazzled by the attraction's two rides—one of which simulates a bucking banshee expedition and the other a calmer journey through the mystical Pandoran jungle, whose replicas of Avatar's bioluminescent plants and floating mountains are being attended to by teams of brown-helmeted Imagineers and construction workers. Even if you're looking down, Rohde wants you to feel as if you're still in Alpha Centauri. "We are obsessive," he says.

A rugged-looking 62-year-old with blue eyes, close-cropped hair, and a long, stubby face, Rohde is conducting this tour wearing a brown hard hat of his own, with a picture of Mickey Mouse on the side. His earrings chime as he continues his dissertation on world creation, stepping around construction equipment and over hoses and power lines. "Remember, in a film, 90 percent of the time you're just looking at an actor's face talking about plot, right?" he says, his voice pitched as if to an auditorium rather than a few visitors standing in front of him. "The detail that you'll see in a film really only exists to underscore the direct action. It doesn't exist in an a priori way for you to examine. But here it precisely does."

Bringing Pandora to life, he says, requires an unusual creative process, combining the theatricality of opera with the operational and design complexity of a nuclear power plant. "This is an art form," Rohde proclaims, stretching his hands in front of him as if plucking the right words out of the air. "Art speaks. People respond. Technology is a cognitive, intellectual thing. Art is visceral. Art is a body experience. It is universal. Remember, we make these places for everybody. That means, first and foremost, this is an emotional experience. You could be from Papua New Guinea. You should be able to walk in here, and it is like the first morning of a new world." Two brown-hatted Imagineers who've quietly joined the tour nod their heads.

Pandora, which one Wall Street analyst conservatively estimates will cost \$500 million to build, is Disney's latest capital outlay in what might best be termed its world creation and



management strategy. Since opening Disneyland in Anaheim, Calif., in 1955, the company has mastered the process of transferring film characters to television screens, retail shelves, Broadway stages, and ice rinks—and of translating them into theme park attractions. "Our parks are a physical manifestation of these stories, these mythologies, and these characters," says Bob Chapek, chairman of Disney's parks and resorts division. To put this in *Lion King*-worthy terms, the process is akin to a fantasy-world-investment circle of life.

The parks are an increasingly important part of Disney's business. Television watchers have been canceling their cable subscriptions, imperiling revenue from ESPN, ABC, Disney Channel, and other properties, which generate the bulk of the company's profit. Stan Meyers, an analyst at Piper Jaffray

Cos. who covers Disney, predicts that by 2020, as its TV profit falters, operating income from the parks will climb by 64 percent, to \$5.4 billion. For that to take place, attractions such as Pandora have to truly enchant visitors.

Disney's theme park dominance went largely unchallenged for a half-century. Competing entertainment conglomerates Time Warner Inc. and Viacom Inc. tried opening parks of their own only to exit the business. Then, in 2010, Universal opened the Wizarding World of Harry Potter at its Islands of Adventure park in Orlando. The attraction, based on J.K. Rowling's enduringly popular novels and the movies they inspired, gives visitors the opportunity to wander the streets of Hogsmeade, drink butterbeer, and soar through simulated skies behind a broomstick-riding Harry. The Wizarding World

increased attendance at the park by 66 percent in its first full year and led to a second Potter attraction, which opened four years later at the adjacent Universal Studios Florida, to crowds willing to wait seven hours for a ride. If that wasn't confounding enough for Disney, which had competed with Universal to build a Potter-based land on its turf, the creative team that designed the original Potter attraction for Universal was led by a former Imagineer who learned the trade from Disney luminaries such as Rohde.

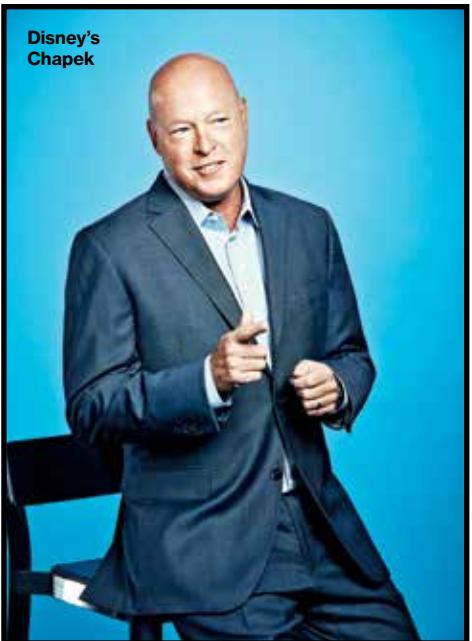
The Wizarding Worlds set a new standard for theme park inventiveness and put Universal's Orlando attractions in a position to overtake Animal Kingdom and Disney's Hollywood Studios, the weakest performers among Disney World's four parks. "Things have really reversed: Disney used to

lead. Now Disney's following Universal," says Gary Goddard, a theme park designer in North Hollywood who's worked for both companies. But, he adds, "in doing so they're going to try to top it."

The theme park industry views Pandora as Disney's response to the Wizarding World and the company's attempt to reassert itself as the industry's leader. Nobody doubts Disney's prowess. The bigger question is whether it has chosen the proper vehicle in Pandora.

*Avatar* remains the highest-grossing movie of all time, with box office receipts of \$2.8 billion, however it hasn't grown into a Potter-order super franchise with millions of ardent fans. Chapek declines to mention Universal by name, let alone concede that he might be feeling any competitive heat. He does say it's nice that his company's closest rival has discovered the virtues of theme park world construction, but that Disney created this business and will continue to define it with its forthcoming attractions.

"We will set a new bar," Chapek vows. And he isn't just talking about *Avatar*. He's referring to another new attraction, scheduled to open two years from now in Anaheim and Orlando. This one is based on a fictitious universe as big and lucrative as Harry Potter's: *Star Wars*.



talking about," says Margaret King, director of the Center for Cultural Studies & Analysis, a firm in Philadelphia that has done park research for Disney and SeaWorld Entertainment Inc. "The closest he could come was to say that he was going to try to sort of cast his films in 3D form, so it was a movie you could walk around in."

The only way Disney could build his park was by developing television shows for ABC, in exchange for which the network took an ownership stake in the park and gave him a line of credit to finance construction. (The irony, of course, is that Disney would purchase ABC four decades later.) As the park went up in Anaheim, Disney often stayed in an apartment above the old-fashioned firehouse on its faux Main Street—which was based on his hometown of Marceline, Mo.—so he could keep watch over it.

There was something biblical about Disney's endeavor. In the areas surrounding Main Street, he built four lands: Fantasyland, a storybook-themed world with rides from the pages of *Peter Pan* and *The Wind in the Willows*; Frontierland, where visitors could ride the Mark Twain Riverboat; Tomorrowland, where they could experience Disney's vision of the future; and Adventureland, inspired by the company's TV shows about nature.

"You look at the parks Disney created, and they're fully realized worlds," says Neal Gabler, author of *Walt Disney: The Triumph of the American Imagination*. "The only two figures who could do that are God and Walt Disney."

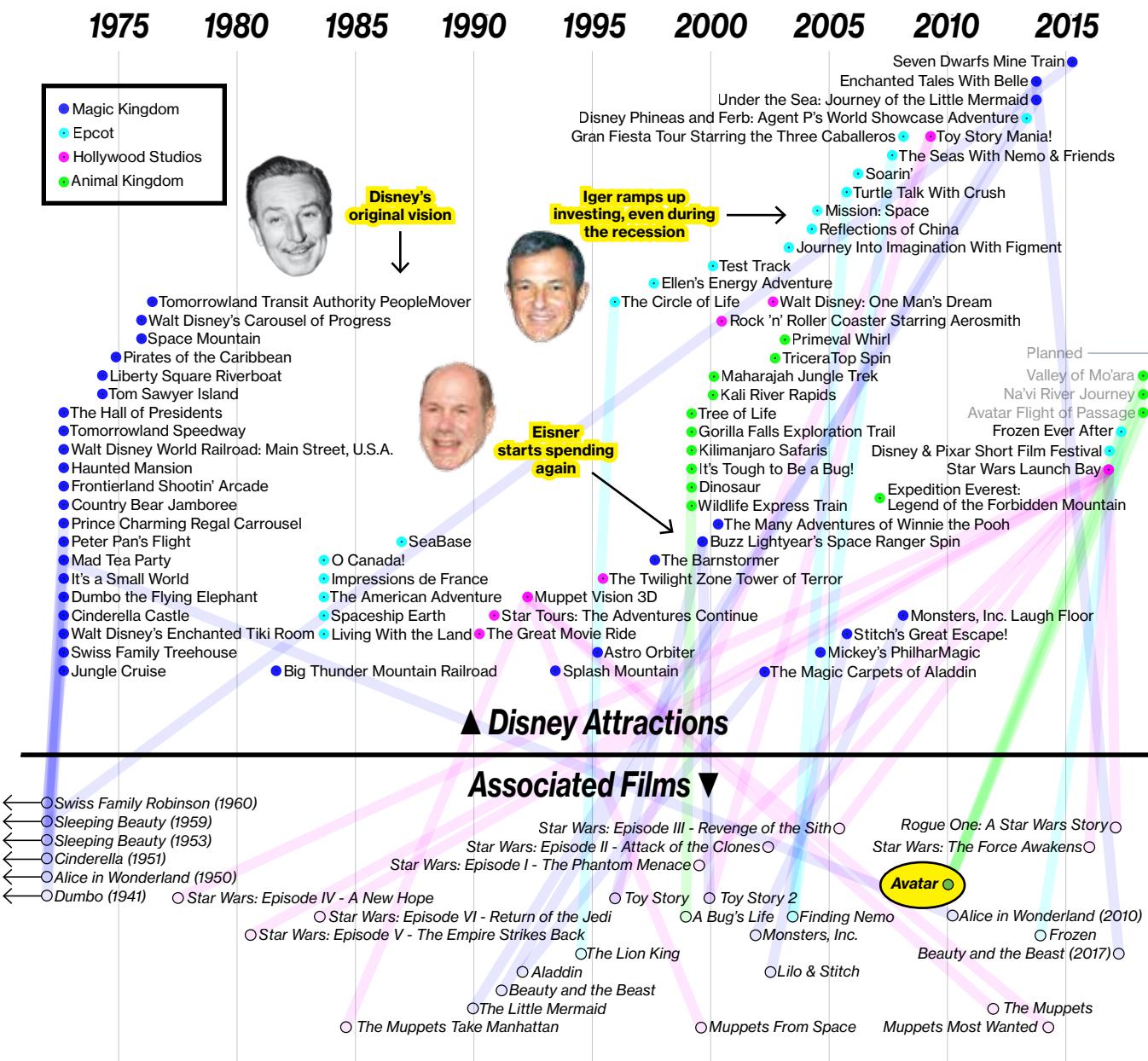
When Disneyland debuted in 1955, so many people wanted in that forgers peddled counterfeit tickets. Women wearing high heels sank into the park's still unsettled asphalt. Within a few years, Disney began assembling land in central Florida for something he referred to as Project X—a second theme park he hoped to construct alongside a utopian community called the Experimental Prototype Community of Tomorrow, or Epcot. Disney died in 1966, but his company pressed on, opening Disney World in Orlando in 1971 and Epcot, now a sort of permanent world's fair, in 1982. A year after that, Tokyo Disneyland opened.

But even with its gleaming new parks, Disney struggled financially. Corporate raiders began circling the Magic Kingdom. One of them, Saul Steinberg, vowed to buy the company and break it up, separating the parks from the TV and movie operations. Things brightened with the hiring, in 1984, of Michael Eisner as chief executive officer. Eisner lacked Walt Disney's creative genius, but he understood that the parks were integral to the company's business. He soon expanded operations, opening showbiz-themed Disney-MGM Studios (now Disney's Hollywood Studios) at Disney World in 1989; Disney California Adventure Park, which celebrates the Golden State, in Anaheim, in 1996; and, three years later, Animal Kingdom, which the company promised would "do for zoos what *Snow White and the Seven Dwarfs* did for the animated feature."

Animal Kingdom was overseen by Rohde, who sported a shoulder-length mane along with his earrings back then. He took his team to Africa to sketch landscapes that would inform

# Yesterday, Today, and Tomorrowland

How Disney has turned films into Florida theme park attractions



## Disney Attractions ▲

## Associated Films ▼

When Walt Disney set out to create Disneyland in the early 1950s, the modern theme park didn't exist. There were plenty of roadside attractions with roller coasters and Ferris wheels, but what Disney had in mind was so radical he had trouble articulating it to consultants and bankers. Even his wife thought he was crazy. "Nobody really knew what he was

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FROM LEFT: PHOTOGRAPH BY EMILY SHUR FOR BLOOMBERG BUSINESSWEEK GETTY IMAGES (3)

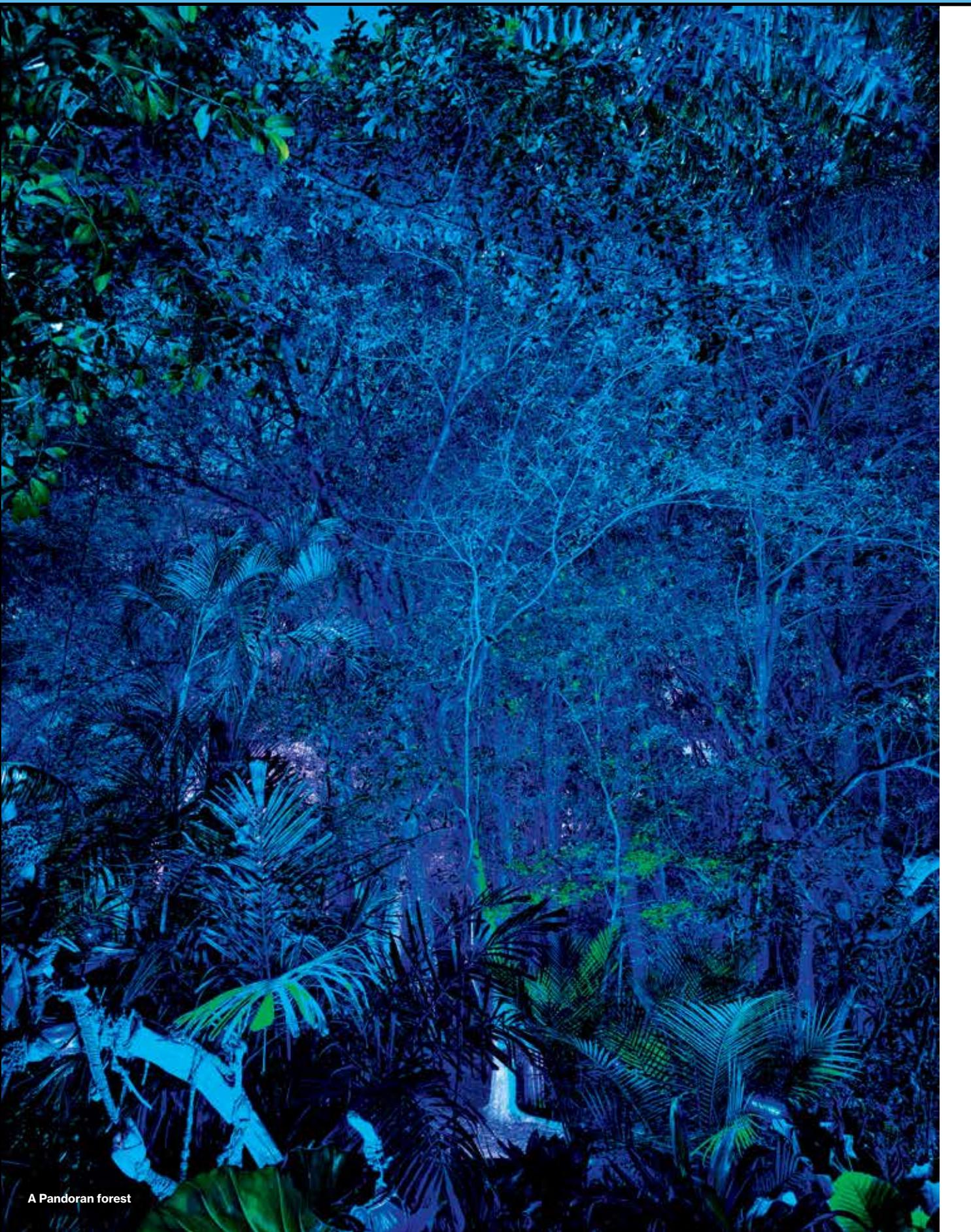
the new park's terrain and journeyed to Nepal to consult with local spiritual leaders about how to properly depict the mythic Yeti. (The resulting creation menaces customers on Animal Kingdom's Expedition Everest roller coaster ride.)

For the most part, the new American parks didn't pull in the same crowds as the original Magic Kingdoms did. Critics called them "half-day parks," because they didn't have enough attractions. "Basically, you took the bus tour, you went on a few things, and then in about four hours you're done—and that includes having a meal," theme park designer Goddard says of Animal Kingdom.

The lackluster performance of the newer parks coincided with bigger problems at Disney: The animation division, which had fueled a resurgence at the company with hits like *The Little Mermaid* and *Aladdin*, sputtered; the company's stock

price plunged; and, in 2005, Eisner resigned. His replacement, Robert Iger, championed a plan to build the company's first theme park in China. Even as a global recession dawned, he wanted to keep investing in the U.S. parks, strengthening the underperformers with new worlds. In the mid-aughts, Disney and Universal competed for the theme park rights to Harry Potter, which Warner Bros. Entertainment Inc. controlled. However, the studio and J.K. Rowling insisted on the right to approve much of the final product, and Disney decided not to bid. In a 2012 interview with *Bloomberg Businessweek*, Iger said the company's parks division "didn't like the terms." So Universal got Potter and ended up, as some in the park business have observed, out Disney-ing Disney.

Paul Daurio, a former Imagineer, wound up leading the creative team that designed the Wizarding World, which



A Pandoran forest

was to include replicas of Hogwarts Castle and the supernatural village of Hogsmeade. There was a plan to serve butterbeer, too, but what did it taste like? The Potter books provided no recipe, which meant Universal would have to find one. (The resulting creation tastes like butterscotch-flavored cream soda.) And Hogsmeade was known to have many shops, but some, such as Scrivenshaft's Quill Shop, a bookstore, were only mentioned briefly in the books by name. Daurio and his team would have to conceive them virtually from scratch.

At times, according to Daurio, Rowling and Universal were predictably at odds. The company, he says, wanted to serve hamburgers, pizza, and Coke, but Rowling insisted on the kind of British-inspired food that her characters might actually eat, such as shepherd's pie or fish and chips. (A Universal spokesman says there was never a dispute over food and declined to elaborate on the company's creative process or its arrangement with Rowling.) As for Coke, Rowling didn't want a drop poured, which was a problem because it had an exclusive deal to sell its products everywhere in Universal's parks. "Imagine you're telling the biggest soda company in the world that has a license throughout the property to sell their product in all your theme parks that they are not going to sell one Coke in the Wizarding World," Daurio says. "That was an enormous hurdle." He says Coke eventually consented.

Rowling also wanted to sell a wide array of Potter-related merchandise, from wands to Mrs. Weasley's knitted sweaters.

he was still working on Wizarding Worlds, he used to tell his colleagues, "Who's got the magic now? Disney was always about, 'We make magic.' Well, guess what? Universal has the magic now."

Disney executives took notice of their competitor's triumph, but those interviewed for this story say they were hardly rattled. For one, the Imagineers were well on their way to completing Cars Land, based on the films by Pixar Animation Studios, at Disney California Adventure Park, which would boost attendance there.

Hoping to achieve something similar at the Animal Kingdom, in 2011 Iger and his then theme park chief Tom Staggs had breakfast with Avatar director Cameron and broached the idea of creating an attraction based on his film. Cameron said in interviews at the time that he was surprised by the company's ambitions. "Disney's vision when they came to me was to create a land," he said after the deal was announced. "I thought we were going to be talking about creating an attraction." Staggs also talked about replicating Pandora in other Disney parks. His high hopes seemed justified: Cameron was planning, after all, to make *Avatar* sequels.

It would be up to Rohde to shepherd Pandora. He found out while he was at a press conference for Aulani, a high-end Disney resort and spa in Hawaii, which he'd also helped design. His reaction to the news was consternation. He didn't

## "Disney was always about, 'We make magic.' Well, guess what? Universal has the magic now"

Daurio says the sweater request puzzled Universal executives, who didn't see why consumers might want to buy woolens in central Florida in July. (Universal says there was never any question that they would sell sweaters.)

Construction companies scoffed when they saw the designs for Hogsmeade's surrealistic buildings. "They simply said, 'These are unbuildable. There are no right angles. Nothing is square or plumb. Everything's wonky,'" Daurio recalls. Eventually, of course, the village was completed, along with Hogwarts Castle, which had to be painted so many times before it was considered to be faithful to Rowling's conception that he lost count. Daurio says he had to meet with Tom Williams, CEO of Universal Parks & Resorts, to justify the final coat. "I fought all those battles," he says with a sigh.

Rowling and Warner Bros. declined to comment, but Brad Globe, Warner Bros.' former head of consumer products, who worked closely with the author, confirms that they asked a great deal of Universal. "I had a conversation with Tom Williams when we opened," says Globe. "He said, 'You guys were really tough. It drove us crazy.'" However, the original Wizarding World was so successful that Universal began work on its second Potter attraction not long after. It has also added ones in Los Angeles and Osaka.

Daurio left Universal soon after opening the first Wizarding World and recently designed a spy-themed restaurant called SafeHouse Chicago. But he loves talking Potter. Back when

object to the idea in theory; a section of Animal Kingdom was originally supposed to be devoted to imaginary beasts, but it was never constructed. Now the alien creatures of *Avatar* would fill that role. The problem, as Rohde saw it, was that he would have to replicate a world made up entirely of computer-generated imagery, or CGI. "You guys are nuts," he thought to himself. "It's going to be physically impossible to build this."

From the start, he says, Disney and Lightstorm Entertainment Inc., Cameron's production company, agreed that the world would be set a generation after the events depicted in the movie, enough time to let the Na'vi and the moon's human visitors set aside their hostilities and start working together to restore the damaged environment. The Disney and Lightstorm teams also agreed that visitors would enjoy a ride that simulated the one taken by the film's protagonist, Jack Sully, on a dragonlike banshee. The ride would begin, as Sully's did, with a jump off a mountain, not just to let visitors imitate his flight—though the excursion would take place in front of a movie screen—but to hide the extensive machinery that would be required.

Mountains are a core competency of the Imagineers. Over the years, they've built several Splash Mountains, one Matterhorn, and an Everest. The challenge with Pandora's mountains was that in *Avatar* they float in mid-air. The Imagineers' solution was to fashion steel supports that ➔

look like vines hanging off the mountains. Rohde sent designers to a rainforest in Hawaii to study foliage, while his team of rock carvers, some of whom had worked on the Wizarding World of Harry Potter, went to China's Zhangjiajie National Forest Park to study its peaks. "People didn't think that the floating mountains would work," says Jon Landau, Cameron's production partner. "All the credit goes to the Imagineers. They cracked that."

Pandora's glowing foliage also required some creativity. Early on, when the Imagineers made mock-ups of the forests, they realized that each alien plant—hundreds of fake ferns and flycatcher-looking things—would have to be connected to a central power source if they were to radiate light after sunset. The plants' electricity requirements were so high that each had to be plugged into its own 2-foot-high control box. The Imagineers hid these behind tree stumps and real plants.

Disney broke ground for Pandora in 2014. It took a year to lay a foundation that could withstand the weight of 22 steel-supported floating mountains. "The raw steel alone was a magnificent and beautiful modern sculpture that could have sat anywhere in the world and been a major destination monument," Rohde says. "It was gorgeous. Some of these pieces of steel were so big we had to borrow the trailers they use for the space shuttle to get them to the site."

While Pandora's mountains were being crafted, Rohde and his team placed hundreds of speakers throughout the landscape, to play the sounds of creatures both real and imaginary. And as with the Wizarding World, there was food to consider. The Imagineers came up with Na'vi-inspired fare such as bioluminescent cocktails and a mysterious-looking meat-and-cheese item. "You know when you go to a foreign country, something is put in front of you, and it looks really unfamiliar?" Rohde says. "You bite into it, and it's like, 'Oh, it tastes like chicken.' We have this odd little thing that looks like a gushy white little pod. You bite into it, and you go, 'It just tastes like a cheeseburger.'

As Rohde wraps up the tour of Pandora, weeks before its scheduled opening, the attraction is still taking form. The

banshee ride isn't running yet. The floating mountains look naked without their waterfalls. But Rohde notes that birds are already nesting on them. "The place is developing its own ecology," he says proudly.

With its spectacular setting and illuminated drinks, Pandora is likely to increase attendance at the Animal Kingdom, especially at night when the park can be fairly empty. But whether it can help Disney fend off Universal is another matter. Much has changed since the 2011 deal with Cameron. The director still has four sequels planned, but he has yet to release any of them. Earlier this year in an interview with the *Toronto Star*, he dispelled talk that he would release the first sequel next year. His plan, he said, was to make all four at once—an "epic undertaking" that would consume the next eight years of his life. In the meantime, the *Avatar* deal may not be the juggernaut Disney once hoped it could be. For that, the company may need *Star Wars*.

If Scott Trowbridge, leader of the creative team developing Disney's *Star Wars* lands, is feeling the pressure of the company's expectations—not to mention those of fans of perhaps the most beloved movie franchise of all time—he isn't betraying it. To the contrary, as he greets visitors at the project's main office in Glendale, Calif., where the Imagineers are headquartered, one morning in late March, he's eager to share some secrets.

A sturdily built 51-year-old, Trowbridge is dressed comfortably in a black quarter-zip sweater, jeans, and black leather shoes. He also wears a tag with his first name spelled in Aurebesh, a runic tongue spoken in *Star Wars*, and the slogan, in English, "The Force is strong with us." Everybody on the team has a similar name tag. Trowbridge leads his guests through a cathedral-like room guarded by a life-size Darth Vader statue. The room is usually occupied by architects, designers, engineers, and software people. Today, most of them are in Anaheim, where Disneyland's *Star Wars* attraction is under construction, so it's pretty quiet. In the back, a smaller workspace features hand-sculpted models of two virtually identical *Star Wars* lands. In true Imagineers fashion, the only parts that have been painted are the mountains.

The attractions are set on a yet unspecified planet that flourished in what Trowbridge describes as the "sub-light-speed era," before the galaxy's more adventurous residents could, for instance, make the Kessel Run in 12 parsecs. "We decided to not build a place that you knew from movies," he says. "We wanted to create a brand-new planet, a remote frontier outpost somewhere on the edge of wild space that is rife with opportunities for you to discover your *Star Wars* story. It used to be a trading port. But with the advent of hyperspace, it kind of got left behind,

which made it a perfect place for those who didn't want to be in the mainstream, our rogue's gallery. All the interesting people? This is where you're going to find them now."

Visitors will enter the *Star Wars* world through a doorway in a surrounding berm, plunging into one of the science fiction saga's familiar-looking desert outposts, marked by low, circular buildings. "It's this exotic marketplace," Trowbridge says. "It's like a souk street market filled with stalls where you can buy fragrances and spices and clothes and toys and equipment from all across the galaxy, sometimes from the black market, but don't ask too many questions."

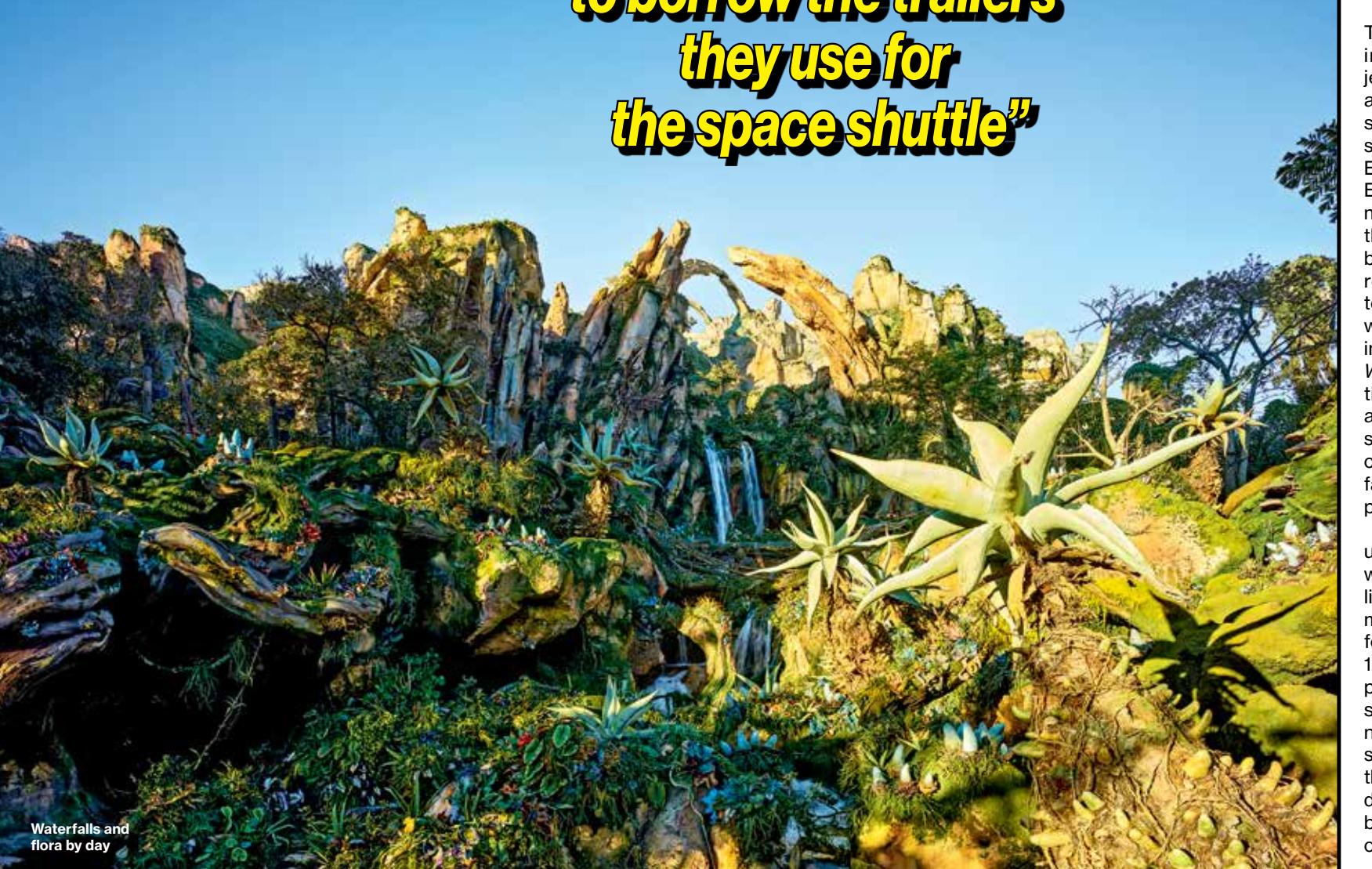
At a cantina, park guests will be served by some unusual characters. Trowbridge points to two sculptors in the rear of the room who are carving alien prototypes. The artists look up and wave. One is working on a large fish-headed creature. "He's one of our cooks," Trowbridge says of the character. "He's awesome. Just ask for the special. It will be worth it." The Imagineers will play around with these chiseled figures until they get their look just right. Then they will fashion molds based on the forms to create life-size robotic doppelgängers. "You're going to see aliens," Trowbridge promises. "You're going to see droids. You're going to see beasts."

Beyond the bazaar, the attraction will feature a First Order spaceport and an ancient forest compound where members of the Resistance can be found. Trowbridge says visitors will meet some favorite characters ("no names," he says when asked for specifics), choose between the light or the dark sides, and, unavoidably, wait in line for either of two anchor attractions—one of which is a ride that will involve "a very epic battle, everything that makes *Star Wars* *Star Wars*."

Trowbridge is reluctant to say much more about the ride, in part because it will incorporate aspects of future films, whose secrets are zealously guarded. "We're looking at this through the lenses of an audience that's arriving in 2019 and what they know," he says. He's more forthcoming about the second ride, which involves the *Millennium Falcon*. "We're going to give you an opportunity to not just fly on it but to actually be at the controls," he says.

Trowbridge leads his guests to an SUV for a short trip to a nondescript warehouse. No signs signify what's going on in the building; if there were any, fans would no doubt be sifting through the trash bins outside. Trowbridge heads into the main space of the warehouse, where a round, black sphere resembling a small Death Star sits. Inside the malevolent-looking structure, the Imagineers are testing a prototype of the *Millennium Falcon* ride. A ladder leads up to a crude version of the cockpit, made with plywood, foam, and thumbtacks. It's surrounded in front by a screen that gives the Falcon's riders the illusion that they're in some kind of docking bay, ready for takeoff. From there, they can go for a test run in an Imax-like environment, navigating their way through tunnels and out into space, where they must dodge the Imperial fleet's TIE fighters.

The real ride will be much more polished and convincing, of course. The mock-up is designed primarily to see how test subjects respond. The Imagineers have put pilots ranging in age from 3 to 79 behind the controls, which tells you something about the franchise's broad demographic appeal. The cockpit is rigged with cameras that record the grimaces and shouts of a few novices who repeatedly crash the world's favorite spaceship while attempting to steer it out of a tunnel. We can't all be Han Solo.

"Ultimately, we're in the fun business," Trowbridge says. "People have to laugh and scream. It's OK to hit things." 

Waterfalls and flora by day