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**"Our bodies
are more athletic.
It goes against
the grain of ballet"**

Gemma Pitchley-Gale,
First Artist, The Royal Ballet

Ballet's Quantum Leap

How sports science built
the perfect dancer



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Ballet's Quantum Leap

How sports science built
the perfect dancer

**"Ballet is not stagnant,
it's progressive"**

William Bracewell, First Soloist,
The Royal Ballet



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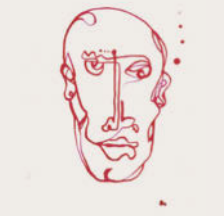
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Steve McQueen's legacy is timeless. More than an actor, more than a pilot, he became a legend. Like TAG Heuer, he defined himself beyond standards and never cracked under pressure.

A full-page photograph of a mountain biker performing a wheelie in a forest. The rider is wearing a white t-shirt, dark pants, and a black helmet with a white logo. The bike is blue and black. The background is a dense forest with green foliage and tree trunks. The text "New mountain bike available.*" is overlaid in white at the bottom left.

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EDITOR'S LETTER

ART VERSUS SCIENCE

Two innately human characteristics seemingly opposed, yet both in pursuit of the same thing: to transcend the limits of possibility. Ballet has resisted the influence of technology on its traditions for more than five centuries, but in recent years the **Royal Ballet School in London** (page 40) has applied sports science to its arcane methods, delivering startling gains both athletic and artistic. See for yourself as we go inside one of the world's oldest and most exclusive temples dedicated to the performing arts.



For our cover story, photographer Rick Guest gained unrivalled access to some of The Royal Ballet's greatest performers. To showcase his gorgeous shots, we've produced two covers this issue.

Bo Burnham (page 28) has long been comfortable with the intersection of art and science – he was an early YouTube superstar. Now, for his debut feature as director, *Eighth Grade*, he's examined how technology is more than a tool for the modern generation, it's the fabric of their existence. Take LA musician **Cuco** (page 32), discovered when he posted his unique blend of cholo rap and synth-pop on Twitter.

And for **Leo Houlding** (page 54), technology was less about being first and more about reinventing the mindset of exploration – traversing Antarctica by kite-ski to reach the world's loneliest mountain.

We hope these stories inspire and entertain.

CONTRIBUTORS THIS ISSUE



MATT RAY

The author of our story on British mountaineer Leo Houlding has himself climbed everything from Wadi Rum to the Rockies, but talking to the explorer about the Antarctic expedition to scale the world's most remote peak put his own experiences into perspective. "From kite-skiing at 45kph to the isolation of being at the end of the world, it's a humbling tale," says Ray. **Page 54**



REBECCA SUN

After shadowing Omar Banos – known to his fans as cosmic synth-rap wunderkind Cuco – the Los Angeles-based writer was struck by how the Chicano musician gets his message across. "Omar is a man of few words who prefers to let his music do the talking," says Sun. "He's on the precipice and has the ingredients to become the next big thing." **Page 32**

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LIFE & STYLE BEYOND THE ORDINARY

BULLEVARDE

Abyss of Cenote

WHAT LIES BENEATH

When a lake in the Italian Dolomites suddenly drained, explorers discovered a prehistoric world quite literally frozen in time

Twenty-five years ago, in the vicinity of Conturines Spitze in Italy's Dolomites, a group of divers hiked to a lake in the mountains of the Fanes-Senes-Braies Nature Park, only to discover it had disappeared. Where there had once been deep water, the divers instead found a hollow basin and an enormous ice mass, with strange craters leading underground. News of these mysterious craters spread, and explorers and researchers flocked to the area to investigate further. What they discovered was a giant cave entrance that had been wedged shut for centuries by an ice-covered

passage, acting like a cork in a wine bottle.

"It was impossible to explore further than 70m inside the ice," says Italian cave explorer Tommaso Santagata. "Melting ice water was feeding into an underground stream when it was warm, and when it got colder the cave passage closed again from the accumulation of snow."

For the next 16 years, explorers tried to access the cave's hidden chambers but were constantly beaten by the forces of nature, until a cold autumn in 2010 finally allowed for a dry expedition into the huge 160m-deep shaft that lay beneath the cover of ice. →

Explorers at the mouth of the
Abyss of Cenote, where a vast ice
'plug' had helped to keep the cave
undiscovered beneath a lake





Tommaso Santagata's team descend an ice tongue while 3D laser-mapping the 285m-deep Abyss

→ “The first time I entered, I was absolutely spellbound by the shapes of the ice for the first few metres beyond the entrance,” says Santagata, who explored the cave during a second expedition in 2015. “The way that you feel inside it is different; looking at these ice walls, they’re beautiful, but at the same time you know that they are fragile like glass and could become very dangerous.”

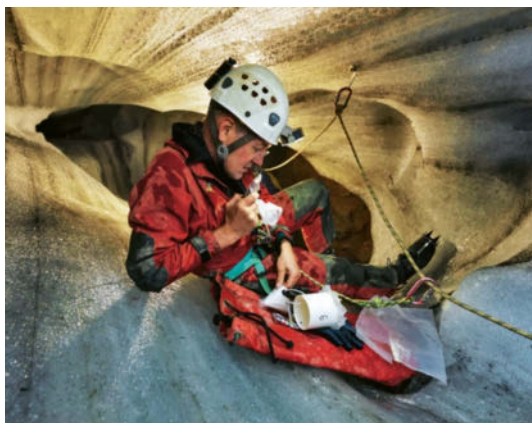
Caves and deep oceans are the Earth’s last remaining frontiers for real exploration. While we can find adventure by scaling mountains, it’s only in the depths of our planet that whole continents of land still lie undiscovered.

“When you start descending the big shaft, you can’t see anything around you because of the cave’s enormous dimensions,” says Santagata. “There’s only you and the rope, descending for about 200m. You only see the floor when you are about 25m from the bottom. You can feel the power of nature, knowing that this immense

environment was created by the flooding of the water and the melting of the ice.”

The curious shape of the cave, now named the Abyss of Cenote, is fascinating to explorers and scientists alike, as the huge ice deposit makes it invaluable to the study of modern and paleoclimate change in this region of the Alps. “Caves are very important to study, because

“THE ICE WALLS ARE BEAUTIFUL BUT FRAGILE LIKE GLASS – AND DANGEROUS”



Researcher Christoph Spötl in the narrow shaft above the cave

they’re usually unaffected by human activities,” says Santagata. “They offer the possibility to observe geological shapes that in most cases are not possible to see from the outside. The deepest chamber of glacier deposits at the bottom of this cave was uncontaminated before its discovery in 1994. Even now, fewer than 10 people have accessed it.”

Photographer Robbie Shone is one of the few – he accompanied Santagata and his team to shoot their mission to study the cave’s 285m depths. Within its giant chamber, he took these otherworldly photographs of the explorers suspended by ropes, clinging to the walls while trying to complete their 3D laser-mapping.

“The thing that’s most different [to other caves] is the ice – it has so many amazing patterns inside it,” says Shone. “It is interesting to photograph, because it’s so vertical. It’s always a real challenge to take photographs when there is nowhere to stand. Everything, including my tripod, must be bolted to the walls.”

The discovery of the Abyss of Cenote illuminates the vastness of a subterranean world we have yet to uncover, and reminds us of the insights that this world can give us about our planet. “Exploring the caves beneath our feet throws light on so many fascinating things, such as archaeology, biology and paleoclimatology,” says the British photographer. “In today’s world, these are highly important.” shonephotography.com



ADVENTURE AWAITS

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Swindle

"I USED TO SAMPLE MY DAD'S RECORDS"

The DJ/producer talks us through the albums that influenced his genre-melding tunes

Cameron Palmer, aka Swindle, is one of the most exciting and versatile producers in the UK right now. Born into a musical household and raised on a soundtrack of jazz, funk and R&B, he began playing piano at the age of eight and was recording his own tunes by the time he was 14. In January this year, the south Londoner released his third album proper, *No More Normal*, an epic collaboration that brings together artists from many diverse musical backgrounds – from the jazz genius of saxophonist Nubya Garcia and the vintage soul vocals of Andrew Ashong, to rapper Kojey Radical's hip-hop wordplay and Ghetts' grime beats. "Music has become more accessible: we mix genres and create new ones almost every summer in London," says Swindle, now 31. "My dream was to have the best in jazz linking up with the best rappers, poets, MCs – people who feel like their art has purpose." Here, he lists five albums that were pivotal in his musical education... Watch an exclusive *No More Normal* session by Swindle at redbull.com



ED RUSH & OPTICAL *THE CREEPS* (2000)

"This record just made me dance. It made us all lose our shit. *The Creeps* set a benchmark for quality in drum-and-bass production – a high standard that people would aim for."



HERBIE HANCOCK *MR HANDS* (1980)

"My dad's tastes were a big influence on me when I was growing up. He used to listen to all the greats of jazz, R&B and funk, and he's played jazz guitar for 50 years. My dad is into good music – musician's music – and I inherited his record collection. When you grow up surrounded by music, you know quality when you hear it – like this album. Some of my earliest samples were from records in my dad's collection."



DR DRE *2001* (1999)

"This album had a major influence on my latest record. I just thought about the way that *2001* made me feel when it was first released. Sonically it was so clean, and I loved its collaborative approach. Dre's work created a new quality standard in rap music."



RONI SIZE *THROUGH THE EYES* (2000)

"I was completely glued to this [a compilation of drum-and-bass artists, presented by Roni Size] for a long time. As a teen, I was massively into drum-and-bass and pirate radio. Life for everyone in my area of London was music, skating and graffiti."



QUINCY JONES *Q'S JOOK JOINT* (1995)

"The list of people on this record is incredible – it's a musician's album. I grew up listening to the likes of [bassist] Marcus Miller and [guitarist] George Benson, so I want to see more musician's albums. It's exciting to see artists with instruments again."

**Jack
Wolfskin**

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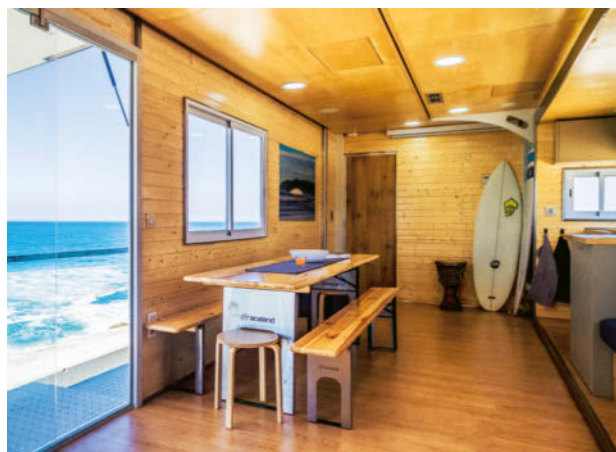
Truck Surf Hotel

BED AND BOARD

Finding the best spots to surf – and to stay – can be a challenge. So this luxuriously converted lorry brings the hotel to the swell



When parked, the Truck Surf Hotel utilises a hydraulic system to expand



Fully equipped communal areas sit alongside the truck's five double bedrooms. A variety of close-up ocean views comes as standard

decided to create a luxury version of their vagabond lifestyle, for everyone to enjoy. Together with a company that specialises in mobile homes, they transformed a heavy-duty Mercedes Actros truck into a portable surf hotel for 10, offering the adventure and freedom of the surfing lifestyle with none of the work involved in chasing the best waves.

The Truck Surf Hotel looks like an average vehicle when on the road, but, once parked up, its secret hydraulic modifications allow for the top deck of the vehicle to expand into five double bedrooms, plus a living room, kitchen, bathroom and shower, with a selection of 25 boards and wetsuits for spontaneous surf sessions.

"The idea came from Eduardo," says Carneiro. "While working in the surf industry, he saw a need for surfers to have the opportunity to explore different line-ups, cultures and adventures."

Cruising the coast of Portugal and Morocco, Carneiro and Ribeiro use their expert knowledge to chase down the best waves in the area while their guests sleep. Each morning, guests awaken to find breakfast prepared and, beyond their lounge terrace, a new beach that guarantees the finest surfing. If the tide turns, the truck quickly folds down in order to chase the next swell.

Rates for a week on the truck start at around £515 per person, depending on location and season. "We're also surf instructors, so surfers who travel with us can improve their skills," says Carneiro. "Guests have a true surf-trip experience and live the way expert surfers do. It's all about sharing travel, making new friends, and combining surf, nature and adventure in a new way of travelling."

trucksurfhotel.com

Who among us doesn't daydream about the van life from time to time? The freedom to sleep under whatever sky you fancy and watch ocean sunsets from your bed seems like the ultimate dirtbag lifestyle. The reality of owning your own van, though, can be more about emptying bio-toilets and sleeping in car parks than beaches and campfire singalongs.

After years living in their camper and chasing waves, Portuguese surfers Daniela Carneiro and Eduardo Ribeiro

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Surreal freeskiing POWDER PLAY

In the mountain paradise of Revelstoke in British Columbia, Canada, the snow forms mounds resembling huge white meringues. Freeskier Mark Abma slices through this wintry wonderland with its lush, powdery cushions. It's an almost surreal experience, he says: "That's why Revelstoke is my favourite." revelstokemountainresort.com



© GRANT GUNDERSON

ALMA

"SONGWRITING IS A FORM OF THERAPY"

UK pop queen Charli XCX is a fan of this Finnish singer-songwriter – and soon you will be, too



ALMA seemed to appear from nowhere. In 2017, the neon-haired singer-songwriter – born Alma-Sofia Miettinen in the small Finnish city of Kuopio – released *Chasing Highs*, an off-kilter dance gem that catapulted her into the Top 20 in the UK and Germany. The song went on to score more than 40 million views on YouTube, and landed ALMA a place on the BBC's Sound of 2018 longlist. Now, having just released her debut album, *Have You Seen Her?*, the 23-year-old reveals how she turns bad memories into fuck-you moments, and why Scandinavian pop music is so much in vogue right now.

THE RED BULLETIN: After the success of *Chasing Highs*, you went home to record your debut album. Why there rather than, say, LA?
ALMA: When I'm in LA, I have no worries – it's sunny, I'm happy, and the parties are great – but I don't feel inspired.

Do worries spark creativity?
 I also write about fun stuff, but struggles and bad memories – real-life stuff – are what I find truly inspiring. These are things I only find at home.

Speaking of Finland, you're a fan of the sauna. Is that a place of inspiration for you?
 It's mainly a place to relax, but also somewhere I do a lot of thinking. So I guess it's fair to say that some of my song ideas were born in the sauna.

"I WANT MY FANS TO FEEL LIBERATED WHEN THEY LISTEN TO MY SONGS"

ALMA dedicated her 2016 song *Karma* to childhood bullies and "all the people that ever tried to push me down"

Many of the songs on *Have You Seen Her?* are about self-acceptance and the pressures of everyday life. Are they autobiographical? Definitely. For me, songwriting is a form of therapy, a way to turn bad experiences into glorious fuck-you moments. Also, I want my fans to feel liberated when they listen to my songs. When I was a kid, I listened to music that made me feel powerful.

Like what?

Amy Winehouse. I loved how honest she was in every song. Even though I didn't have the same problems that she did, I could feel her pain and it made me feel safe and better.

Do you have any advice on the best way to get problems off your chest?

I'd say that people should write down their thoughts and worries. Keep a diary, talk to a friend, let it out. It helps to figure out why you feel the way you do. That might feel weird at first, but for me it has been the best thing ever.

There's a wave of young Scandinavian female musicians enjoying international success at the moment. Why is that?

Sometimes I'll hear a pop song from the US and it will make me want to dance, but it won't touch me on a deeper emotional level. A lot of people crave honesty in music these days; you want stories that feel real. In that sense, I feel that Scandinavian artists have an advantage right now.

In what way?

Because Scandinavians aren't trying to make their life look any more exciting than it is. We're just very normal and humble. That helps if you want to write no-bullshit songs.

ALMA's debut album, *Have You Seen Her?*, is out now; cyberalma.com



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Skate heaven

NAKED BEAUTY

Known as the 'Nude Bowl', this fabled spot has attracted skaters for decades, but it's not easy to find. The empty swimming pool is the last remnant of a former nudist colony on the outskirts of Palm Springs, and photographer Dan Krauss had to do some sleuthing to pin it down. "I scoured Google Earth to find it, based on some vague directions I'd found online," he says. Krauss convinced pro skater Ryan Decenzo to accompany him to the site, and the photographer spent a day shooting Decenzo as he practised nailing the grind over the deathbox.

Instagram: @dankrauss

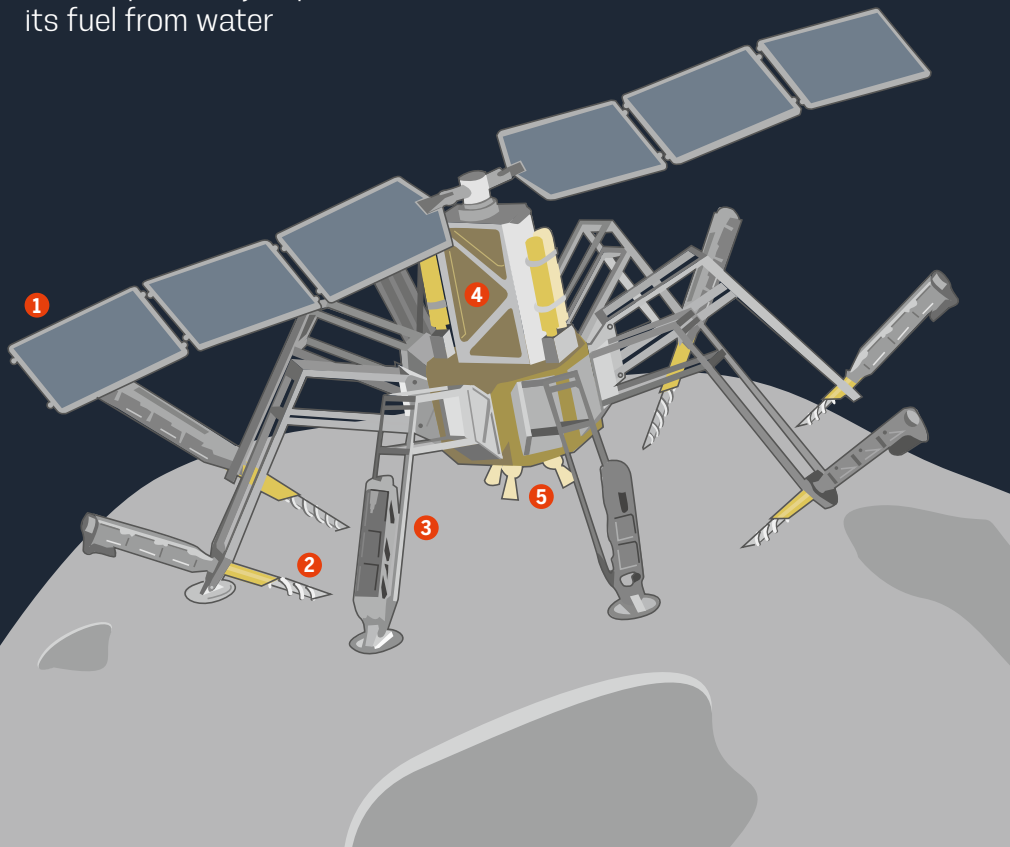




Steam spacecraft

BLAST-OFF FROM THE PAST

Space travel goes Steam Age with an interplanetary explorer that derives its fuel from water

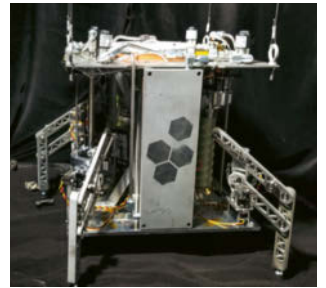


Steam. It was the technology that powered us into the industrial age, but now it's little more than a relic to be found in railway museums, having long ago been replaced by more efficient fuels such as natural gas, petroleum and electricity. However, the steam engine may be about to make its comeback in the most cutting-edge of spheres: interstellar space travel.

Scientists from the University of Central Florida (UCF) have teamed up with Californian start-up Honeybee Robotics to design a steam-powered spacecraft capable of mining water from an asteroid's surface, providing potentially unlimited fuel for exploring the stars. The vessel, which is known as *The World Is Not Enough* (WINE) and is the size of a microwave oven, has already passed its first test on a simulated asteroid in a controlled vacuum. "WINE successfully mined soil, made rocket propellant and launched itself on a jet of steam extracted from the simulant,"

1. The craft lands on an asteroid or other solar-system body
2. Coring bits drill into hydrated minerals or icy regolith
3. Heaters inside the drill release water vapour from the regolith
4. The water vapour moves up out of the drill and freezes in a cold trap
5. The water is heated to create high-pressure steam used as a propellant

"WINE IS DESIGNED TO NEVER RUN OUT OF PROPELLANT"



The prototype spacecraft WINE is the size of a microwave oven

says UCF planetary scientist Phil Metzger. "It's awesome."

Steam-powered space travel makes sense when you consider past experience: successful spacecraft such as the plutonium-powered Saturn probe *Cassini* and the ion-propelled asteroid-belt explorer *Dawn* had to end their missions as a result of running out of fuel. "Each time, we lost our tremendous investment spent building and sending the spacecraft to its target," Metzger says.

Water, though, is abundant in the universe. "As WINE is designed to never run out of propellant, exploration will be less expensive," he continues. "We could use this technology to hop to the Moon, Ceres, Europa, Titan, Pluto, the poles of Mercury, asteroids – anywhere there is water and sufficiently low gravity. It allows us to explore in a shorter amount of time, since we don't have to wait years for a new spacecraft to travel from Earth."

Partly funded by NASA, the WINE team is now seeking partners to further its vision of a new steam age among the stars. There are still factors that need improving – better detection of 'wet' asteroids, for example – but the team is confident. Steam is good for ironing out creases, after all. honeybeerobotics.com

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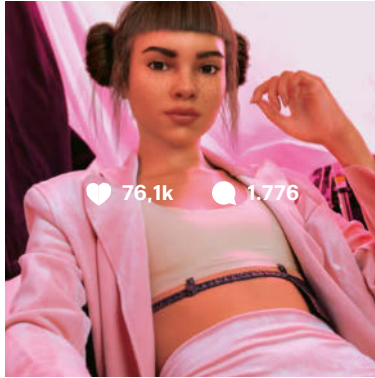
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Lil Miquela

EXTREMELY CANNY VALLEY

The robots are taking over... your Instagram feed. Meet the social-media celebrity who's fake by design

Miquela Sousa is one of Instagram's hottest influencers. 'Lil Miquela's 1.5 million followers eagerly scroll through her posts to check out her desirable outfits and read about exclusive parties she has attended. But the thing that really sets this social-media superstar apart from her peers is that, outside her feed, she doesn't exist.

"I'm a musician, I'm 19, and I am a robot," says Miquela on her style blog for high-end streetwear brand Opening

Ceremony. "I was built by a company in Silicon Valley called Cain Intelligence, designed to be a servant and sold to the world's 1%."

As with many stories in this online world where truth and fiction are often blurred, the reality is rather different: Miquela is, in fact, an avatar, brought into existence using CGI and photo manipulation. Her creators are Brud, an LA-based tech start-up working towards "a more tolerant world with robotics, artificial intelligence, and culture".

Behind Miquela's friendly face is a team of business minds making real money: it's reported that investors have poured more than £15 million into Brud's work with virtual Instagrammers. Unlike real-life influencers, who have the power of independent thought, simulated personalities are fully controllable and can be curated to commercial needs.

"The guys behind Miquela are able to use her to present ideas," says creative strategist Christophe Brumby. "She's just a spokesperson for a network of the world's most

influential people, or at least the most connected. She can catalyse the zeitgeist in a broad yet condensed manner that no real person could."

And Miquela's fabricated existence doesn't feel out of place among Instagram's feed of curated and Photoshopped images. "It doesn't really matter if she's real or not," says Brumby. "Everyone's gone past that discussion."

But Miquela may soon gain the autonomy to speak her own mind. "Technology will make it possible for the virtual influencer to use data to produce their own storylines," Brumby says. "They will begin pushing the limitations that are currently inhibiting them, using video manipulation to move to environments that seem even more live."

Miquela herself chooses not to take part in discussions such as this. "It's some creepy sci-fi stuff for sure," she says, "which is maybe why I try not to think about it."

Instagram: @lilmiquela

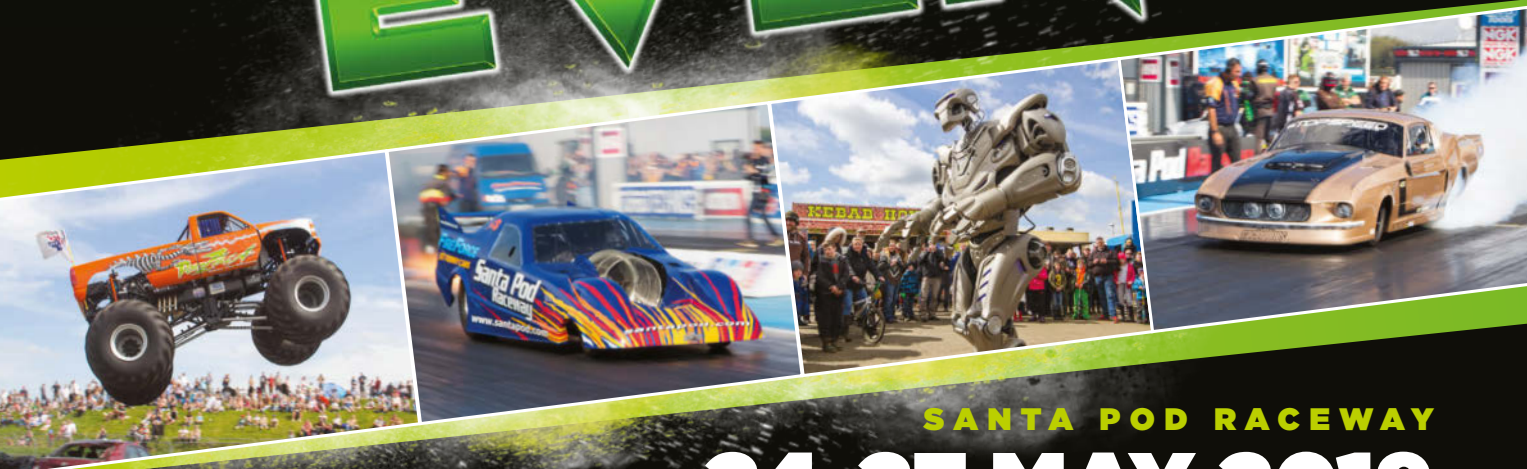
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BO BURNHAM Rebirth of School

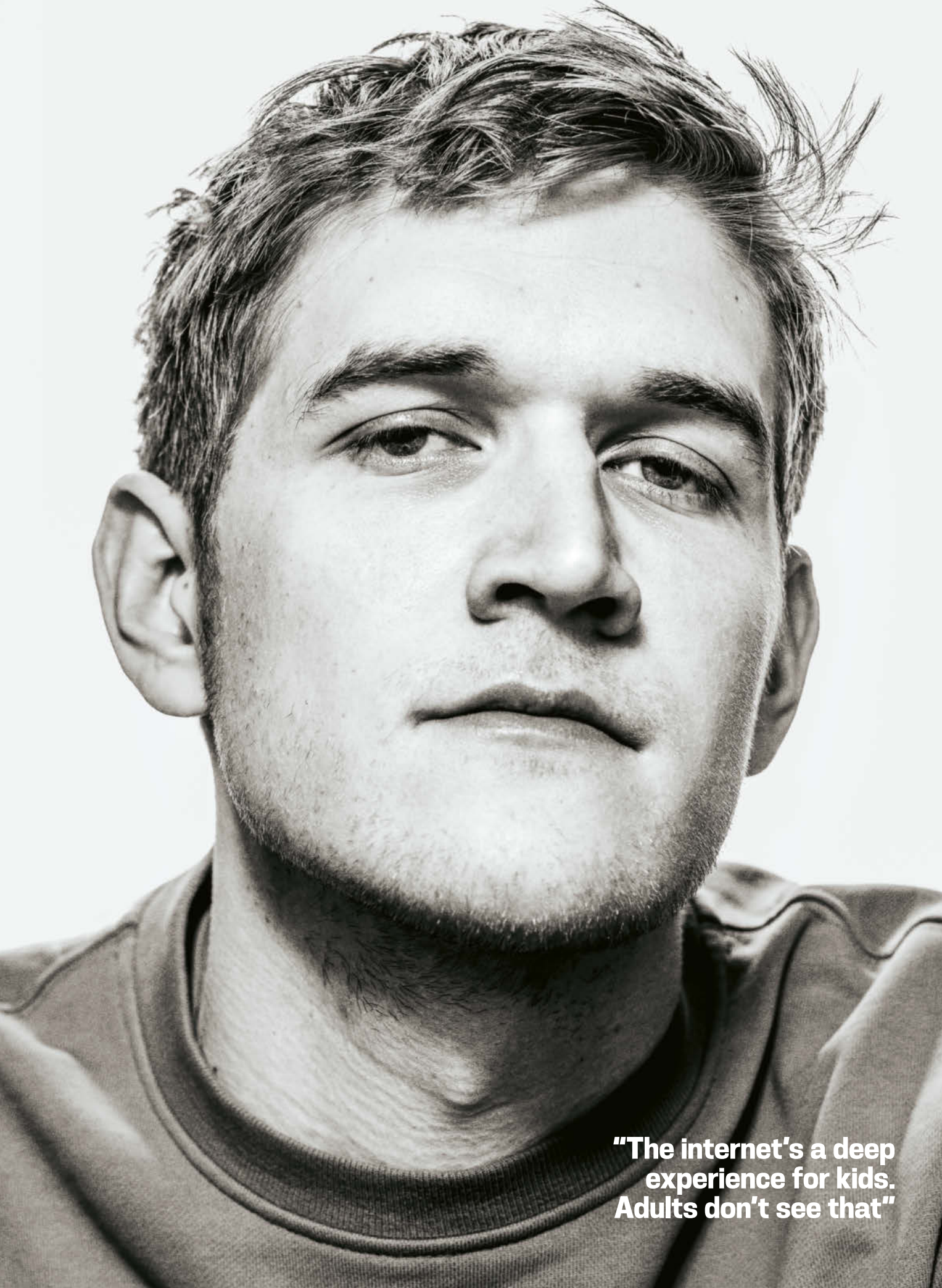
Words TOM GUISE

The first-time director and writer of *Eighth Grade* on making the *Saving Private Ryan* of high-school movies

American Graffiti, *Dazed and Confused*, *Ferris Bueller's Day Off*, *Boyhood* – the best high-school movies embody the growing pains of their generation. Now, the current class of teenagers has a coming-of-age film of its own: *Eighth Grade*. The debut feature from comedian-turned-director Bo Burnham, it tells the tale of Kayla Day (played by Elsie Fisher), a socially awkward 13-year-old New Yorker who reaches out to a likely audience of no one via her YouTube channel. In the real world, however, her story has connected with audiences and critics alike.

When it was screened at the Sundance London film festival last June, *Eighth Grade* won the Audience Favourite award; almost a year later, as it finally goes on general release in the UK, the movie has a 99 per cent Certified Fresh rating on Rotten Tomatoes from nearly 250 reviews. Molly Ringwald, star of classic '80s teen movies *The Breakfast Club*, *Sixteen Candles* and *Pretty in Pink*, tweeted that it was “the best film about adolescence I've seen... maybe ever”.

Bo Burnham – born Robert Pickering Burnham in Hamilton, Massachusetts – could be considered the most unlikely creator of a film about today's teen anxiety. At 28, he's positively ancient by Gen-Z standards; when he was the age of his protagonist, YouTube didn't even exist. Three years later, in



**"The internet's a deep
experience for kids.
Adults don't see that"**

2006, he became one of the online platform's first viral stars with his homemade music video *My Whole Family Thinks I'm Gay*, which went on to receive more than 10 million views. By 18, Burnham was the youngest comedian to earn a Comedy Central solo special, and filmmaker Judd Apatow approached him to pen a script pitched as the "anti-High School Musical". It never materialised. "I was not ready to write a movie at 18," he said of the moment. Almost a decade later, he finally was. Burnham, it turned out, was the perfect person to bring to screen the anxieties of the Snapchat generation.

"My anxiety blossomed during my stand-up, not before. It was weird in that way," he says. "The movie is primarily about anxiety – it was written in a crisis of anxiety. The emotions resonated with me, but the specifics weren't my own; what attracted me to the film was that I hadn't experienced it. People who have never been cowboys or astronauts are able to write about them. I explored my own feelings through another person, another story."

That story, perhaps unsurprisingly, was easy to research. "The thing about this generation is they're posting everything about themselves online. I just looked at videos that kids blog about themselves. You learn a lot about what their life is like outside of it, and how they want the world to see them. That's the truth of the moment for me: not who we worry we are, but who we want the world to see us as."

How the world would see – and judge – Burnham's film brought back some of that anxiety for him. "I'm a man making a movie about a young woman, so I was a little worried about that, but [the younger generation] seem to respond to it," he says. Ironically, this audience can't watch the film at the cinema: the Motion Picture Association of America, notoriously prudish about adolescent drama, slapped it with an R rating, and here in the UK it's been rated 15. "I'm curious what they'll say when they look back on it five years from now, and whether they'll recognise their experience," says Burnham. "It's a lot to process when you're actually in eighth grade."

Likely they, and everyone else, will. "The movie, as much as it's about the internet and anxiety, really ends up being about being 13," says Burnham. "Your body is exploding, your mind is mashed potatoes, pool parties are the worst. You're having your first crushes and they feel super intense. Your relationship with your parents, even if it's good, is still not working. You want your privacy, but you also want to be taken care of. Most of it is the same; we're just now existing in a different space with different tools to feel the things we've always felt."

As for where Burnham ranks his work in the pantheon of high-school movies, he doesn't. "I know this is a coming-of-age film, but I didn't think of it as such," he says. "I looked at visceral, subjective movies that follow people. I wanted to make *The Wrestler* with a 13-year-old girl; *Saving Private Ryan*, but about a pool party; *One Flew Over the Cuckoo's Nest*... The performances, the controlled chaos – those are the sort of movies I was reaching for."

High-school whimsical

Classic coming-of-age cinema in quotes

***The Breakfast Club* (1985)**

"We're all pretty bizarre. Some of us are just better at hiding it, that's all"

***Ferris Bueller's Day Off* (1986)**

"Life moves pretty fast. If you don't stop and look around once in a while, you could miss it"

***Dazed and Confused* (1993)**

"The older you get, the more rules they're gonna try to get you to follow. You just gotta keep livin', man"

***10 Things I Hate About You* (1999)**

"Don't let anyone ever make you feel like you don't deserve what you want"

***Ghost World* (2001)**

"High school is like the training wheels for the bicycle of real life"



THE RED BULLETIN: What was your inspiration when creating the movie?

BO BURNHAM: I wanted to talk about living with the internet – that was something very urgent to me. Then I found this kid in my writing and realised that I could say everything I wanted to through her. I wasn't trying to talk about being a kid; when you do that, you're starting from a condescending place. I wasn't 13, I wasn't in eighth grade, and I was discovering her experience with her, rather than being nostalgic. It can definitely be viewed nostalgically, but I wanted to make a movie about kids that wasn't attempting to conjure memories.

Were you worried about creating an authentic portrayal of Kayla?

Yeah, but I knew I was going to collaborate with an actor who would breathe life into the role – as long as I listened to her. I was lucky enough to find a very talented actor [Fisher, who was 13 at the time].



Junior senior: Burnham goes back to school on the set of *Eighth Grade*

We saw a hundred kids after her, but there was never a second choice. Everyone else felt like a confident kid pretending to be shy; she played it like a shy kid pretending to be confident. She understood: don't be the person that doesn't speak, be the one that wants to speak but can't.

How much of your own anxiety went into the film?

It was really just [a matter of] talking about it. [Anxiety] is not uncommon in my line of work: a lot of performers struggle with it, and that includes me. For someone who has that, it's definitely not game over, because there are ways to gain control over it. A lot of it is just being exposed to the feeling – not because that will solve it, but so that when you get to those moments of panic, you know you don't die, that you're OK. I freaked out a bunch before and got through it. That's true for a lot of things in life: expose yourself to what you're afraid of.

What does the internet represent to a young person?

I still haven't figured it out, but I don't think it's any one thing. It's a medium through which they feel everything; a place where they live, connect, isolate, stimulate, objectify, express and numb themselves. It isn't just surface, it functions on a 'soul' level. Adults see it as just cat videos and Snapchatting, not knowing it's a really deep experience for these kids. It's something existential for them. This movie is hoping to do justice to their experience online, but not explain it to them.

Are lifestyles changing quicker now?

I think so. I feel as close to people 10 years older than me as I do to those three years younger. The generational markers that used to happen every 15 years – the Walkman, the vinyl record – now occur every six months. Going through middle school with Twitter and without it is a very different experience, and that was the reality for kids just two years apart. Everything is changing exponentially. In theory, you'd have to do a new one of these movies every two years to represent every generation – there's going to be the virtual-reality generation in five years, then the microchip-in-their-head generation five years after that.

Did you worry the movie would be out of date before it was released?

It already is. It's recognisably a little more 2018 than 2019, but that's OK. People get so afraid of things moving on that they strip the current moment of all its specificity, and then it means nothing. Even if a meme is old, the movie isn't about specific references, it's about the feeling. The movie is a time capsule, so it changes the more you step away from it.

What will people think when looking back at this time?

I've thought about that recently. They won't look back. There will be so much content, so much media produced every day that there will be no time to look back at what was produced before. Or they'll be looking through the rubble to find clean water and come across a broken iPhone, and they'll build a canopy out of iPhones to shelter themselves from the radiation of the exposed sun. That's probably closer to the truth... in a couple of hundred years.

Eighth Grade is at cinemas across the UK from April 26; eighthgrade.movie



THE COMEBACK KID

Indie-pop prodigy Omar Banos, aka CUCO, was on the verge of mainstream fame when, last October, a tour-van crash left his career hanging in the balance. Now, aged 20, he's back – with a major record deal, a change in sound and a new perspective on life

Words REBECCA SUN Photography RAMONA ROSALES



A star is borne: Cuco connects with his audience at the Hi Hat in Los Angeles

Bathed in a magenta glow, Cuco fidgets with his guitar. Clad in a baggy striped polo, cap pulled low to obscure his eyes, he's nervous. This is despite the fact he's spent the past two years performing on stages across many continents. And the fact he's back on home turf: the Hi Hat in Los Angeles' Highland Park district, where he played his first-ever show. And that the 50-strong audience is composed entirely of friends and familiar faces, out on a Tuesday afternoon in late January to support him and his four bandmates.

"This is the most people I've ever known compiled into one place," he mutters sheepishly into the microphone by way of a greeting.

Through his signature emotional lyrics and dreamy DIY production, Cuco – aged just 20 – has already gained the respect

and admiration of the indie-pop scene and captured the hearts of seemingly every Latina teen in LA and beyond. Only the day before, he signed with Interscope, but that's not why he's anxious. "This is our first time since the fucking accident," he says. "We're going to play a song that hasn't come out yet."

Then Cuco launches into a plaintive ballad, one with an instantly catchy, swoon-worthy hook. There's no rock-star posturing from him or his band, but the crowd sway and wave their illuminated smartphones in unison all the same.

"*Tell me that you love me. Tell me that you need me,*" Cuco croons confidently, all the nerves seeming to melt away into a solid, sweet falsetto, if only for a moment. "*I fell in love again.*"

Cuco was born Omar Banos in Inglewood, California, to a Mexican-American family who, while not musicians themselves, had



a love of music, meaning the boy was exposed to a diverse array of genres. Cuco grew up immersed in sounds from the US, UK, Italy, France, Asia and, of course, Mexico, paving the way for his fusion of styles as an artist in later life.

His only direct instruction was on guitar, which he began learning when he was eight. Everything else – drums, keys, bass, trumpet, mellophone, French horn (and soon woodwind instruments) – has been largely self-taught, as was music production, through a cheap MIDI keyboard bought when he was 15, which came with a version of the software Ableton Live. His early Instagram posts document a young artist honing his style, practising metal riffs on the guitar and posting snippets of his work.

The family had by then moved to nearby Hawthorne, where Banos played



Cuco fans flank the singer and declare their allegiance at his Hi Hat comeback gag

horns for the Hawthorne High School marching band and experimented with his own music – and other influences – outside school. “Mexican music inspired me super heavy,” he says. “And I was into psychedelic rock, but I didn’t really start understanding it until I tried psychedelics in high school.”

Banos uploaded his covers and originals to Soundcloud under the moniker Heavy Trip, which he later switched to Cuco (Spanish for ‘cuckoo’), his mother’s nickname for him. “[My songs] were just there,” he says. “I don’t think anybody ever gave a shit, because I didn’t have [many] friends in high school, which was partially why I had so much time to put out all this music.”

Drawing inspiration from his favourite artists and albums – Tame Impala’s *Innerspeaker* and *Lonerism* “completely

re-shifted everything I thought I knew about music”, as did Foxygen and Thundercat – and fusing them with the ‘cholo rap’ of his cultural environs (MC Magic, Lil Rob, Baby Bash), Cuco developed his own kind of hazy, Spanglish-spangled sound.

“Back then, we played a lot of metal and crazy time-signature music,” says Esai Salas, one of his best friends from high school. “So when he first showed me a recording of what we now know as the Cuco style, I was very taken aback – in a good way. And before I knew it, he started building a little name for himself on social media.”

By now, Cuco’s origin story is the stuff of ‘21st-century-indie-star-is-born’ legend. Days after graduating from high school in June 2016, he posted a melancholy instrumental slide-guitar cover of Santo

“Cuco is at the focal point of a movement. First-generation kids are looking to him for inspiration”

**"The accident
allowed Cuco
time to create.
It allowed him
the time to
breathe again"**



Cuco fused influences
such as Tame Impala
and cholo rap to create
his 'Spanglish' sound

& Johnny's 1959 surf-rock hit *Sleep Walk* on Twitter. As fate would have it, those who stumbled across the video noticed that he was wearing merch from Pouya and tagged the Miami hip-hop artist.

"Pouya retweeted it," says Cuco, "and a bunch of people retweeted him. That's how it started. I was at a party when I started seeing all these retweets and was like, 'Yo, what the fuck is happening?'"

From there, young underground-music lovers, always on the lookout for new discoveries, tracked down Cuco's original compositions on Soundcloud, where he began building a following beyond Hawthorne. That summer, he released a seven-track mixtape titled *Wannabewithu*, which included *Amor de Siempre* and *Lover is a Day* (each of which have had multimillion plays on Spotify). With his languid, lo-fi production and wistful lyrics ("*Time changed, we're different. But my mind still says redundant things. Can I not think? Will you love this part of me?*"), he tapped into an element of the Gen-Z imagination in the prime of youth yet already reminiscing about it.

"Not to get super emotional in a depressing way, but I feel like somehow I can bring people familiar feelings where they don't really know where it comes from," says Cuco, who describes his music as having "a euphoric, nostalgic vibe".

He played his first solo show that September, as part of the Just Another Rap Show concert series. Cuco's name didn't even appear on the flyer for the event, but there he was at the Venice 6114 art centre, with a crowd huddled around him and singing along to every word of *Lover is a Day*.

Having found a tribe of like-minded musical misfits, Cuco assembled a band with his "homies" (including Salas on bass), and they played their first show together on October 8, 2016, in the backyard of a house in Santa Fe Springs, south-east LA. This time, Cuco was the headliner. He dropped a second mixtape, *Songs4u*, the following January and continued to play backyards, drawing ever-growing crowds as his music spread.

One person who caught wind of the local phenomenon was fellow SoCal-bred Mexican-American Doris Muñoz, then a 23-year-old fledgling music manager, who checked out one of Cuco's backyard shows in February 2017. "I was in a sea of

teenagers singing every lyric to *Amor de Siempre*, which is all in Spanish," she says. "Here's this kid making alternative music mixed with *bolero*, playing a trumpet. And he has this band, all Mexican kids from the hood of Hawthorne. I cried that night when I saw it."

Muñoz convinced Cuco to become only her second client, and she got to work on his career immediately, booking shows and setting up meetings with major labels. The following month, Cuco sold out his first venue show at the Hi Hat – Muñoz's Solidarity for Sanctuary benefit for undocumented immigrants, which was attended by industry scouts.

Carlos Cancela, who works in A&R at Interscope, received his first text about Cuco that night, from a friend who was at that show. "Then I got two other calls that week from people saying, 'You gotta check this kid out,'" he says. "I was blown away. It's everything I love about music: really psychedelic, really sweet, very honest." By the end of the week, Cuco and Muñoz were sitting in his office, where Cuco and Cancela hit it off musically.

But Cuco held off signing to a major (or any) record label right away. "You have to hear everyone out, because not everybody is given the opportunity to be courted like this," Muñoz advised him. In between being wooed by music execs, Cuco continued to focus on writing and producing his own singles at home – *Lo Que Siento*, his most-played track to date, hit the internet in May 2017 – and gigging with his band, all while ostensibly still enrolled at Santa Monica College. He admits to "ditching classes to go play shows," which, understandably, caused friction with his immigrant parents.

"They were sceptical, but once they saw that I was actually making money through my music and was serious about it, they were like, 'All right, you're good to drop out of college.' I'd already dropped out, so I was relieved they said that!"

With no more pesky classes to tie him down, Cuco quickly graduated from local venues to big cross-country tours. In 2018, he hit the major festival circuit –Coachella, Lollapalooza, Austin City Limits, SXSW and more – and even crossed both ponds, performing in Orléans, London, Hamburg, Jakarta, Singapore and Bangkok.

"It's crazy, because these kids are singing back to me in Spanish," he says, aware of his potential as an ambassador



"It's crazy – kids sing back to me in Spanish. Just being able to represent the Latino community in a positive light is a big deal"

for an entire culture currently under siege. “Just being able to represent [the Latino community] in a more positive light [is a big deal], especially in this political climate, which is super fucked.”

The likes of *Pitchfork* and *Fader* praised his EP *Chiquito*, which he self-released mid-tour and was promoted by Apple Music with giant murals in LA and New York. And by the autumn of 2018, Cuco was in final talks about signing a major deal with Interscope. It appeared that nothing could stop his stratospheric ascent – until an incident on the road almost ended everything before it had really begun.

October 8 is a date permanently etched into Cuco lore. In 2016, it was the day he and his bandmates played together for the first time, a handful of recent high-school graduates jamming in a South LA backyard. Exactly two years later, it was the day they almost lost their lives on a stretch of Interstate 40 in western Tennessee.

Cuco has a hard time talking about what happened. “It’s very anxiety-inducing,” he says, revealing that he still experiences PTSD from the accident. “I wake up thinking I’m still there and I’m going to crash. I hallucinate a lot.”

Salas is better able to reconstruct the night. The band were in a large passenger van en route to Nashville, travelling east. At about 3am, there was a loss of control and the van tipped over, sliding to a rest in the slow lane. “I was in the last row on the side that flipped and was knocked unconscious,” Salas recalls. “I came around to the guitarist screaming, ‘Wake up!’” He and the others – 10 in total – scrambled out of the van to huddle on the hard shoulder, but that’s when a lorry suddenly appeared and struck their vehicle, which slammed into Cuco and his crew.

“We all kind of went down like bowling pins, and that’s how a lot of the major injuries happened,” says Salas, who was knocked out a second time, sustaining concussion and a separated shoulder. Miraculously, everyone survived – but the accident left them shaken, physically and emotionally. Later that same day, Muñoz and Cancela flew to Tennessee, where they found Cuco vacillating between dark moods as a result of his extreme pain – he had surgery to insert 13 screws and a rod into

his left leg – and gratitude for being alive. Following a week in the hospital, the band were able to fly home to LA, but the rest of the tour – set to include dates in Canada, Chile, Argentina, Ireland, Luxembourg and Spain – was cancelled. “Just being in a car was very hard for us in the beginning,” Salas says. “The slightest little bump on the freeway and you would tense up.”

Muñoz and Cancela were careful not to push Cuco, but he jumped back into music-making of his own volition, eager to keep working on his new album. (He had lost some of his new material when his computer was smashed in the crash.) “He brought his studio back into his bedroom where it all began,” says Muñoz. “I saw him dive into his music and utilise that as his outlet to get through it.”

Thanks to a full recovery and the benefit of a few months’ distance, the parties involved are all now able to see the silver lining in what happened. “[Cuco] was starting to burn out a bit. Now, the band are all out of casts and off crutches and in group therapy. It’s beautiful to see a group of brown men do therapy together, to normalise that,” Muñoz says, adding that Cuco has even called the accident a blessing in disguise. “It allowed him the time to create. It allowed him the time to breathe again.” The unplanned respite may be the last



“People like us, who grew up in the environment we did, had to mature fairly quickly”

that Cuco and his band have for a while. With the Interscope signing, the kid from Hawthorne is about to see his already-impressive career rise even higher.

“Omar’s done a lot of the groundwork on his own,” says Cancela. He cites a mentor’s advice on the two ways to find new talent: “You either ride the Zeitgeist or you find something that the charts are missing, that the culture doesn’t know it needs. Omar has already stirred something up and become something people didn’t realise they needed.”

Although he’s still only 20, Cuco’s two years of unique life experiences have shaped him as an artist. “I’m starting to steer away from the regular Cuco shit,” he says, calling it “a concept that’s tight but super easy to mimic”. Of the new material to be showcased on his major-label debut (due later this year), he’ll only say that the songs are very diverse, his production “more crisp”, and his writing process more mature. Some hint of his new sound might be found on *Fix Me*, the surprise collaboration with producer Dillon Francis that dropped in February.

“People like us, who grew up in the environments that we grew up in, had to mature fairly quickly,” says Salas, noting that his friend has adapted well to the responsibilities of his fame.

“He’s assuming the position more now,” adds Muñoz. “He now understands he’s at the focal point of a movement, and that a lot of first-generation kids are looking to him for inspiration, motivation and representation.”

“I really hate being the centre of attention,” says Cuco, who is mystified by his heartthrob status. “I never pulled in high school or college for the fucking year that I was there. It’s out of nowhere. I don’t know what to think about it.” He adds that one day he’d like to switch to a producer’s role. But for now, Cuco says, “The impact means more to me than anything. Getting messages from kids like, ‘Yo, you helped me through so much.’”

The support is reciprocal. Back at the Hi Hat on that January afternoon, Cuco stands onstage at the end of his first set in almost four months. “We’re scared to get back on the road,” he admits to the crowd. “This is a first step for us in getting us back there. It’s been a fucking trip, and I appreciate you all for being here.” Cuco is performing at All Points East festival at Victoria Park, London, on Sunday, May 26; loverisaday.com

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High
Performance
Art
How sports
science
revolutionised
ballet

Words **MARK BAILEY**
Photography **RICK GUEST**



Principal dancer
Matthew Ball is
74kg of lean,
graceful muscle and
explosive power

The poise and beauty of ballet masks a gritty world of bruised bodies, inflamed muscles, pain and pressure. But a game-changing generation of dancers at The Royal Ballet are using innovative sports science to fortify their bodies and minds, and thrust their art form into the future

When Gemma Pitchley-Gale is not pirouetting in pink pointe shoes at the Royal Opera House – the London home of the world-famous Royal Ballet – she can be found power-lifting cast-iron barbells in the gym. The petite dancer once dead-lifted 97.5kg – more than double her 47kg bodyweight. “People think we just flounce about in the studio all day, are skinny and weak, and don’t eat anything,” says the South Londoner. “When they find out how strong we are now, they think, ‘What? Wow!’” Her colleague Claire Calvert, who has danced roles including the Sugar Plum Fairy in *The Nutcracker*, has a squat PB of 100kg, which makes her stronger, pound for pound, than legendary 116kg South African rugby prop Tendai ‘The Beast’ Mtawarira.

The male dancers in their company also possess astonishing power. Welshman William Bracewell can lift his 73kg bodyweight for 45 consecutive calf-raises. During a routine gym workout, Alexander Campbell, a cricket-loving Australian, lifts a cumulative load of 3,655kg – roughly the weight of a full Ford Transit van. And Matthew Ball, a Liverpool-born dancer with boyband good-looks, can endure the equivalent of four times his bodyweight when holding a stationary single-leg squat. “I showed my parents a video of me lifting weights and even they said, ‘Should you be doing that?’” smiles Ball, 26, bulging veins clearly visible on his sculpted biceps. “But when I land from a big jump, I have the equivalent of 500kg of force through my legs, so I need to train for that.” To provide some perspective, 500kg is the approximate weight of a 5m-long saltwater crocodile.

Today’s dancers are powering up in the gym for good reason: ballet is a beautiful but brutal world of aching muscles and crushing fatigue. To master the sublime footwork of iconic ballets such as *Swan Lake*, *Cinderella* or this season’s crowd-pleaser *Romeo and Juliet*, these performers undergo up to six hours of intricate rehearsals every day, and deliver as many as four live shows each week. The physical toll is immense: the Royal Ballet’s dancers – of whom there are around 100, and whose bloodied feet are wrecked by blisters, bunions, black nails, cuts and bruises – burn through 12,000 shoes on average every year. With a mean of 6.8 injuries per year, ranging from



Claire Calvert works on her core with a sandbag and a plyometric box

foot sprains to muscle tears, dancers suffer an injury attrition rate comparable to that of American football players.

Behind the scenes, tired dancers with slender limbs and sharp cheekbones slink into the airy rehearsal studios – the women in tutus and leg-warmers, the men in tight shorts and loose-fitting vests. “The initial morning feeling is stiff, painful and crunchy, basically,” laughs Pitchley-Gale. Following a 75-minute warm-up class, the hard work begins. “We can sometimes rehearse from 12pm to 6.30pm with hardly any breaks,” says Calvert. “Technically, that isn’t allowed – we usually get an hour’s lunch – but sometimes it’s just how rehearsals work out.” Then come the dazzling but draining shows in front of 2,250 spectators. “There is always pressure, because people pay to see the best shows,” explains Campbell. “I might not get home until one in the morning, and we’re back in the studio at 9.30am.”

Despite this gruelling regime, nobody had ever analysed the unique demands on dancers’

bodies until, in 2013, the Royal Ballet opened the Mason Healthcare Suite – a tech-filled facility staffed by 17 experts in sports science, physiotherapy, nutrition, massage, rehabilitation and psychology – in a bid to reduce injuries, fight fatigue and improve performances.

“I was shocked when I saw the dancers’ workload,” admits Greg Retter, the clinical director of Ballet Healthcare who previously worked as rehabilitation manager for Team GB’s Olympic athletes. “Dancers go at it 100 per cent, in every rehearsal, several times a day. Athletes periodise training for competitions, but dancers perform continuously from September to June, often rehearsing six ballets at once. That churn is unrelenting.”

This brutal routine is necessary because dancers must produce an extraordinary precision of movement with consistency. Whereas a footballer can skew a shot wide of their target, or a musician can hit the odd stray note, a dancer knows that every step must be immaculate in order to create the expected delicacy and detail of the artistic spectacle on stage. “The way they cognitively process their kinaesthetic awareness [muscle memory] for complex movement patterns is unlike any athlete I have seen,” says Retter. “But ask them to change the movement and, within a few repeats, it is ingrained. Neuroplasticity such as this is incredible.”

This level of exactitude is what makes ballet so tough to perform – and beautiful to watch. “Ballet is an aesthetic art, so you know this part of your arm should look exactly like this, and that this finger should be here,” explains Calvert. “It makes ballet unique. Human bodies adapt to activities, but nobody is made for ballet. We do things in turnout [when a dancer rotates their legs at the hip, pointing their knees and toes outwards] that nobody is born to do.”

To learn more, Retter’s team began to analyse everything from dancers’ landing forces to their muscle activation patterns. They used the same force-plate technology employed by the European Space Agency to train astronauts, in addition to muscle-measuring electromyography (EMG) units, oxygen masks and heart-rate monitors. The team also funded a PhD student at St Mary’s University to quantify dancers’ performances using accelerometers. Through the cold lens of sports science, ballet was revealed to be a riot of lactate-torched limbs, racing heart rates and oxygen-starved muscles. Male dancers endure forces of up to 6,000 newtons on landing – a fifth higher than the explosive punch of heavyweight boxer Anthony Joshua. Female dancers can face 4,000 newtons – greater than the bone-crunching impact of a rugby tackle. Even the stress of performing in

front of a live audience can cause dancers' pain-inducing blood lactate to spike by eight per cent.

This matrix of data sparked a revelation: for decades, while athletes, adventurers and soldiers had all embraced sports science, dancers had never benefitted from the right strength training, nutritional advice, recovery protocols or technological innovations to help them endure their unique physical workload. Pain and injury were inevitable. "When I graduated [from the Royal Ballet School in 2005] we just did a bit of Pilates and stretching," says Pitchley-Gale. "There were two cross-trainers literally shoved in the corridor." Proactive dancers such as Pitchley-Gale sought help externally by working with a personal trainer, but others were anything but health-conscious: former Soloist Eric Underwood admitted to drinking, smoking, and eating burgers, while the Ukrainian dancer Sergei Polunin indulged in drugs and all-night parties.

The reality is that before any dancers could learn to embrace sports science, a change of perspective was needed. Dancers are artists, not athletes, whose goal is to evoke emotional responses through the sublime movements of their bodies. As a result, they instinctively value unquantifiable concepts such as grace and elegance over cruder measurable statistics like leg strength or jump height. Ballet is also defiantly traditional: the dance form originated in the Italian Renaissance courts of the 15th century and many dances still performed today date back to the 19th century, including *The Sleeping Beauty* (which debuted in 1890), *The Nutcracker* (1892), and *Swan Lake* (1895). Suspicious that science would poison the purity of their artistic expression and pollute the heritage of their art, dancers have, historically, had little interest in new technology and ideas. Tradition was inspiring dancers but also holding them back.

"There is this belief that ballet is all about the art – and it absolutely is," says Retter. "But strength, fitness, psychological well-being and good nutrition are what free the dancers to perform their complex choreography and convey that emotion on stage. We can now say to dancers, 'These are your building blocks for an amazing performance.'"

The Royal Ballet's own pioneering research has also coincided with a wider revolution in dance science. In 2012, a number of UK dance institutions and universities came together to launch the National Institute of Dance Medicine and Science (NIDMS), an organisation that would promote research in the field. Its findings have become impossible to ignore. One study has shown that a year of strength training cuts dancers' injury frequency by

59 per cent. Another paper shows that six weeks of conditioning even improved dancers' aesthetic competence through better control of movement, spatial awareness, timing and rhythmical accuracy. Hungry for self-improvement and persuaded by the mounting evidence, many forward-thinking dancers have now opened up to innovation. "Ballet is an old art form that has been formalised, but it is also something that is undeniably athletic, so we have something to learn from that," explains Ball.

The sight of slender dancers performing heavy squats, tossing battle ropes and swinging kettlebells in the on-site gym is the most striking component of this revolution. The strength training protects muscles against injury, helps dissipate landing forces, boosts bone health and enhances jump heights. But to build strength without muscle bulk, which would detract from the dancers' grace, the sports science staff use innovative techniques. Dancers stand on force plates that measure their explosive power, and hoist barbells fitted with linear encoders that record the speed of their lifts. By doing low repetitions with heavy weights and focusing on explosive speed, the dancers can build raw strength by improving the efficiency of the contractions in their muscles and the magnitude of electrical impulses coursing through them – without triggering growth of tight-splitting proportions.

"I thought the gym would give me big legs, but we are training in an intelligent way, so that doesn't happen," reveals Calvert. "It just makes us stronger." Bracewell was amazed at the impact: "I noticed a big change in my capacity to deal with rehearsals. I was less sore after dancing, and my lower-back, ankle and knee problems have all been reduced." He has even noticed the difference on stage. "It builds confidence. If you dead-lift a big weight four or five times and you know it's lighter than the person you're lifting, you think, 'This feels easy now.'"

A figurehead of the next generation of dancers, Ball relishes the strength-training protocols. "Ballet is this stylised way of moving,

RESILIENCE:

Claire Calvert

A First Soloist (the rank just below Principal, or lead), Calvert has performed in roles including the Lilac Fairy in *The Sleeping Beauty*. In 2013, she suffered an osteochondral lesion – a small injury to the cartilage – on her femur (thigh bone), withering the muscle to half its normal size and leaving a 1.5cm hole in the cartilage. To galvanise her muscles and joints, Calvert began performing heavy squats and deadlifts. "I turned it into a positive thing," explains the 31-year-old. "I'd trained from the age of 11, always on a schedule with no control over what I did. Now I could think about how I could be a better dancer and spend hours in the gym. I came back stronger and happier."

The traditions of ballet were inspiring dancers but also holding them back



Calvert combines
sheer raw power
with superhuman
flexibility



"Human bodies adapt to activities," says Calvert, "but nobody is made for ballet"

Calvert refines her movements on the advanced Gyrotonic machine



A full-body portrait of Alexander Campbell, a man with dark hair and a light beard, standing against a dark blue background. He is wearing a grey long-sleeved shirt with a small V-neck and blue leggings. He is looking directly at the camera with a neutral expression.

Campbell:
a cricket-playing
dancer leading
the sports science
revolution

FITNESS:
Alexander
Campbell

The 32-year-old Sydney-born Principal dancer has performed famous roles such as the Prince in *The Nutcracker*. "All my technical ability comes from long rehearsals, but when you're fatigued your skills decrease," he explains. So he does drills on the rowing machine, with intervals mirroring the demands of his upcoming roles. "I got into ballet when I was five, but also [Aussie Rules] football, soccer and cricket. I suggested recovery boots and ice baths to my classmates and they said, 'Why would you do that?' Now we use them all the time."

all to do with beauty and line, so it's not the natural biomechanical way," he explains. "Adding strength gives your body the platform to handle that. I'm obsessed with jumping as high as possible, so I love doing heavy squats, pushing my max strength and measuring it."

At The Royal Ballet, technology is now routinely employed in the service of art. The EMG tests have taught dancers to strengthen foot-stabilising muscles such as the medial gastrocnemius – located at the back of the calf – while the force-plate tests provide feedback on how to soften landings. Thanks to the heart-rate tests, dancers now perform bespoke fitness drills that precisely mirror the demands of upcoming roles. "It gives you the confidence to know you can make it through the show, so you don't hold back," says Campbell.

Other new gadgets available include Gyrotonic machines, a system of cables which build flexibility through fluid, dance-specific movements; Game Ready cold-therapy leg wraps, which are also used by the Manchester City football team, and inflatable RP-X Recovery Boots, which squeeze out lactic acid after rehearsals. "They give you this lovely feeling of fresh blood flowing through your legs," says Pitchley-Gale. All activities are monitored on Smartabase, a data-analysis platform used by the Dallas Cowboys NFL team.

Today's dancers are even benefitting from neuroscience and psychology. With the help of occupational psychologist Britt Tajet-Foxell, the performers practise how to beat anxiety by superimposing positive images over negative thoughts: one learnt to stop thinking of her injured ankle as a broken twig and replace the thought with uplifting images of running water and a blue sky. The dancers defuse nerves by creating memory chains of successful performances. "I broke my foot badly and had some anxiety about landing, but Britt helped me with repetitions of positive imagery of my past performances," says Pitchley-Gale. They also learn to neutralise stress by compartmentalising different parts of their life – like ballet, family and finances – into imaginary rooms and systematically 'cleaning out' each one.

Because of the hectic rehearsal schedule, even eating properly became a major challenge for dancers. "We might only get 15 minutes' break and then we're jumping again, so you can't exactly eat a jacket potato or you'll feel awful," says Calvert. She remembers a flustered nutritionist visiting the company in the days before the healthcare suite was established: "When he heard about our routine, he just said, 'If I were you, I would carry a bag of snacks around with me and just eat a big meal on Sunday.' He just didn't know what to suggest."

Now they follow intelligent, dance-specific diets devised by The Royal Ballet's nutritionist, Jacqueline Birtwisle, who has worked with the Leicester Tigers rugby team and British Rowing. For energy, dancers consume easily digestible food such as porridge, scrambled eggs, risotto, houmous, salad, Greek yoghurt, baked beans, or Buddha bowls. They eat Omega-3-rich SMASH (salmon, mackerel, anchovies, sardines and herring) to aid muscle recovery, and cook with olive – not sunflower – oil to fight inflammation. After late-night shows, when it can be hard to

Ballet dancers suffer an injury attrition rate comparable to that of American football players



During the average gym session, Campbell lifts the cumulative weight of a full Ford Transit van

Bracewell's RP-X Recovery Boots use sequential pressure to boost blood flow after exercise

PRECISION:

William

Bracewell

Currently performing selected dates as the lead in The Royal Ballet's production of *Romeo and Juliet*, the 28-year-old First Soloist is used to difficult roles. "The hardest was [choreographer Wayne McGregor's 2016 ballet] *Obsidian Tear*," says Bracewell. "It's intense – 25 minutes of constant but incredible dancing." The Swansea-born dancer carefully fuels his body for optimal performance: "I think functionally: pasta for energy two hours before a show, and protein to repair my muscles afterwards." Bracewell has also learnt visualisation techniques. "Ballets are all very different," he says. "I imagine them as houses decorated in different styles. Going to Buckingham Palace, you'd adopt a very different demeanour to [if you were] going to a barn or warehouse. Thinking that way helps me focus."





STRENGTH:

Gemma

Pitchley-Gale

As a First Artist, the 32-year-old from South London is a senior member of the corps de ballet, which performs intricately choreographed group dances on stage. But in between the graceful poses and backstage selfies on her Instagram are videos of her lifting heavy weights in the gym. "Nobody wants to be a bulky ballerina, but it doesn't do that – it just makes us stronger. Using the leg machine, I kept saying to my tutor, 'That's fine, add a few more plates.' He couldn't believe what I was lifting. I enjoy it so much that I'm now doing a Level 3 course to become a personal trainer."

**"When people
find out how
strong we are,
they think,
'What? Wow!'"**



Top: Pitchley- Gale builds strength on an advanced Pilates reformer. Right: Calvert can squat more than double her bodyweight

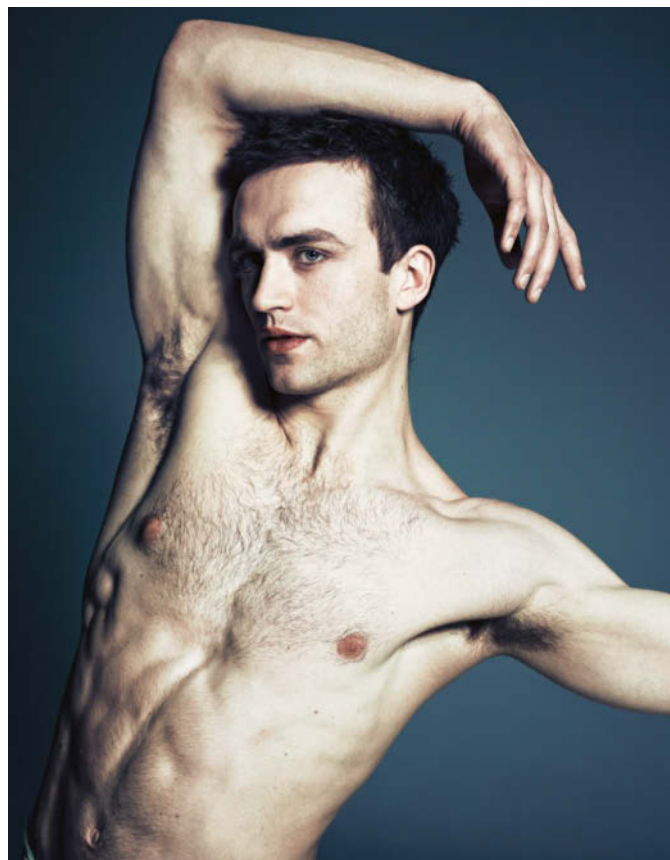
The dancers defuse nerves by creating memory chains of successful performances

digest heavy meals, they drink muscle-repairing nut butter and milkshakes. As they spend so much time indoors, they also take Vitamin D, which has been shown to increase dancers' isometric strength – the kind enhanced by 'static' exercises such as the Plank – by 18.7 per cent.

Towards the end of our visit, Retter takes us to see the stunning stage at the Royal Opera House, which sits behind a three-tonne crimson curtain. It's a reminder of his team's ultimate objective: to support the performances on stage. "The Royal Ballet has a body of historical work from choreographers that is set in stone," he says. "Our job is not to change ballet, but to support the dancers performing it. For example, an athlete might soften their landings with a flexed hip, bent knee and bent ankle, but in ballet you land with a stiff leg. That's just the ballet style – we can't change it. What we *can* do is make dancers more robust to cope with that load, which is where the force plates and squats and expertise all impact on what you see here on stage."

Not all dancers can be persuaded to adopt the new ideas, and some are still suspicious of the scientific approach. "The conflict is still there, but it's not as polarised as it was," admits Retter. "First, because we have dancers coming through the Royal Ballet School who now learn how physical capacity can help them. And second, because we now have these 'champions' at the top who understand this doesn't detract from their artistic expression, but enhances it." This season, 80 per cent of dancers submitted themselves for voluntary tests in the healthcare suite – the highest take-up ever. "More specifically, they were engaged with the results and had specific goals, like wanting to improve their jumps, based on feedback from the artistic staff and The Royal Ballet's director, Kevin O'Hare. It's the first time I have seen that performance dialogue, rather than just identifying weaknesses to address."

Science will never replace the unique talent required to create artistic beauty on stage. But if the primary role of a dancer is to transcend the limits of their body in order to elicit an emotional response from their audience – and thereby elevate athleticism into art – science has a powerful supporting role to play. "When you



FOCUS:

Matthew Ball

Last March, Ball got a call from the director of The Royal Ballet: principal dancer David Hallberg had injured his calf in the lead role of Albrecht in *Giselle*. Despite having danced it only once before, he was asked to step in. "When you lose all choice, you follow your routine," says Ball, who was later promoted to Principal and can now be seen on selected dates as the lead in *Romeo and Juliet*. "I got a taxi, changed, had my make-up done and felt less nervous than before other performances." Ball has developed strategies to aid his focus on stage. "You can give yourself a cue so your brain focuses on something identifiable. If it is an emotional thing, like my heart bursting, I put my hand on my heart to focus my effort on that."

run a race, you just run," says Calvert. "But we have to move well, look pretty, smile and create an emotional response, even though we are literally dying at the end. Doing squats doesn't help me to do 32 fouettés [fast, whipped turns], because I still have to practise the steps. But with that new base of strength and confidence, I feel more present in the performance, which means I can focus better on the story or the character."

This sentiment is arguably the keystone of the entire ballet revolution. Dancers have to execute precise and strictly controlled choreography, yet somehow express themselves individually within the framework of that performance. "When you feel confident, that's when the natural joy in your performances can come out," says Calvert. By blending ballet's traditional values of discipline and dedication with fresh insights from science, dancers are creating the perfect balance, both on and off stage. "This transition is definitely happening," says Pitchley-Gale. "And it's happening right now."

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GOING NOWHERE FAST

To reach the most remote
mountain on Earth, one
team of polar adventurers
had to reinvent the very
methods of exploration

Words MATT RAY

**"Repetition
won't give
you the same
rewards. You
have to go
further, harder,
more remote"**

**Pictured: Houlding scales an unclimbed,
unnamed summit next to the Spectre**



An icy 30kph wind whips around Leo Houlding's ears. He pulls on the control bar in his hands to release the kite that's harnessed to him. It launches into the air, billowing open to the size

of a car. His skis bite into concrete-hard snow as he instantly accelerates, the heavily laden sled tied to him bouncing behind. Then the roaring in his ears fades and everything is smooth: he's running with the wind. Sastrugi – wind-sculpted snow formations – flash past beneath his skis. For as far as he can see, brilliant white meets deep blue in a single, unbroken line.

This is Antarctica, where the temperature can drop to real-feel -70°C and exposed skin can freeze and die within seconds. Houlding, a British climber and adventurer, is kite-skiing to the world's most remote mountain in one of its most hostile environments, racing against the end of the Antarctic summer and the icy grip of death.

Houlding was first inspired to scale Antarctica's remote summits at the age of 16, after seeing a picture of the 2,930m-high Ulvetanna Peak – otherwise known as the 'Wolf's Fang' – which had just been climbed for the first time. "It looked like

something out of Middle Earth," he says. "I thought, 'That's the coolest thing I've ever seen. One day I'm going to climb it.'"

Mountains were in abundance where Houlding grew up in the Lake District and, later, North Wales. In 1998, at the age of 18, he became the first Briton to free-climb the 914m vertical rock face of El Capitan in Yosemite National Park. Seventeen years later, he led the first ascent of the north-west face of Greenland's 1,200m granite Mirror Wall.

"I love the feeling of being high up on something super-exposed," he says. "But you don't get the same reward from repeating something; you've got to keep going further, harder, more remote." After he achieved his ambition of summiting Ulvetanna in 2013, he needed to go further again. More remote.

At 750m tall, the Spectre is a granite spire more than twice the height of London's Shard. It sits in the Gothic Range of the Transantarctic Mountains – a field of peaks stretching three times the length of the Alps – 1,000km from the nearest international airstrip and 440km from the closest human settlement, a US base at the South Pole. "It's fair to say that the Spectre is the most remote mountain on Earth," says Houlding.

To reach it would require being air-dropped near the South Pole, travelling

Leo Houlding

350km to the mountain's base and the edge of the Ross Ice Shelf, before a return journey of almost 1,500km back up to the South Pole and then out across the wastes to the edge of the Ronne Ice Shelf.

However, man-hauling a pulk filled with food and supplies could mean progress as slow as 1kph, and take at least 100 days to cover the distance. Houlding had little more than half of that time before the Antarctic summer and its 24-hour-a-day sunshine ended and travel became lethal; violent storms shorten the window drastically. Looking for a high-speed solution to tackling the long-distance polar mission, he turned to extreme kite-skier and alpinist Jean Burgun.

Wind of change

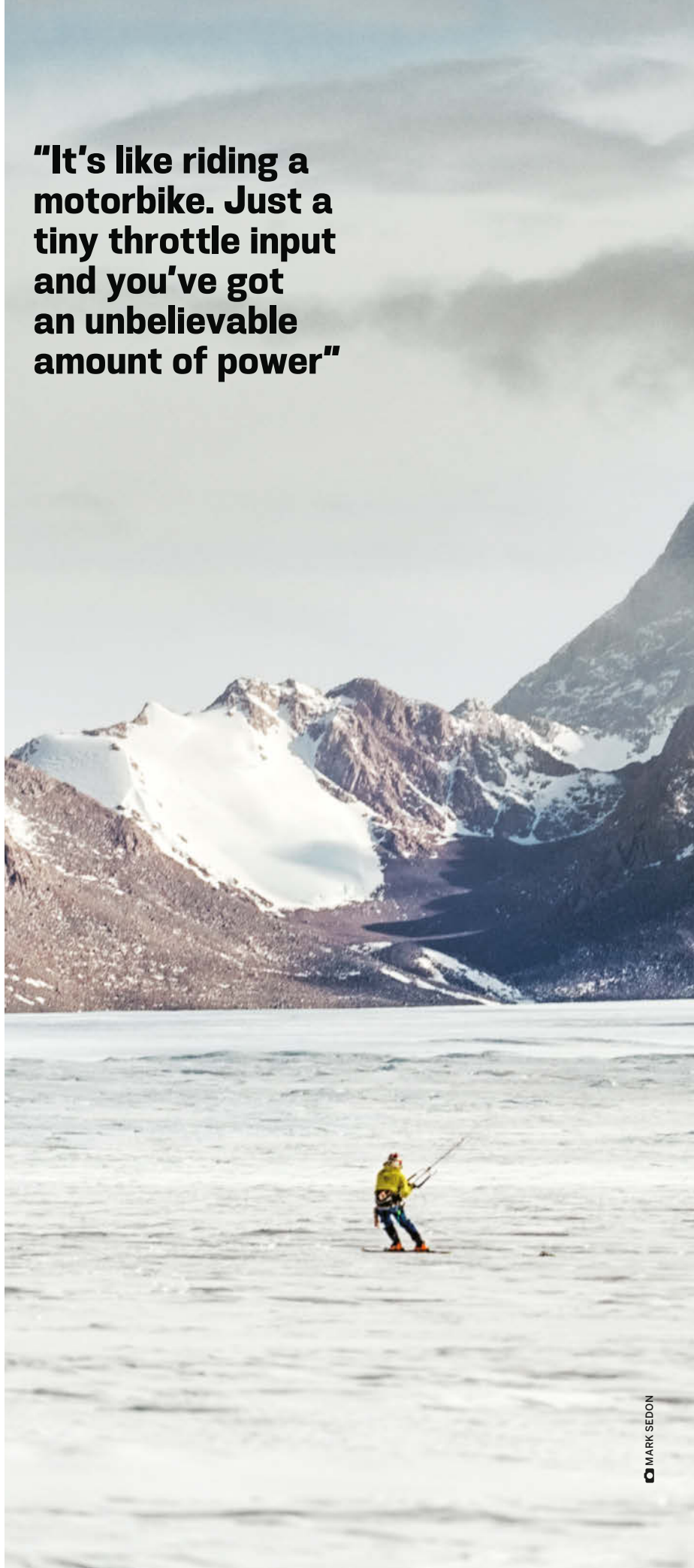
Norway's Hardangervidda plateau is famed for its polar weather conditions. It's here that Houlding trained with Burgun. During several expeditions, they worked to pioneer an extreme, high-performance kite-skiing set-up, combining new high-aspect-ratio kites – the kind used to race hydrofoils at up to 95kph on water – with the stiff, heavy skis used by FIS World Cup giant-slam athletes.

These powerful kites are rated to the rider's weight, but Houlding planned to drag a 200kg sled behind him – the bigger the load, the bigger the kite. Launching one of these overpowered beasts in a 32kph wind is like lassoing a hurricane, but, once underway, the sensation is sublime. "It goes quiet because you're travelling with the wind," says Houlding. It would transform man-hauling hours into minutes of cruising, but this high-reward combo came with high risks, too. "It's like a motorbike," he says. "Just a tiny throttle input and you've got an unbelievable amount of power." He discovered just how much power during a spectacular crash on the journey to the Spectre.

"I suddenly found myself 6m in the air – if I hadn't had a 200kg sledge, it would have been 20m – the rope went tight and I managed to land on my skis, which exploded off, and I came tumbling to a halt. Then the pulk came flying past me at 25kph. I was lucky to walk away."

High-speed tumbles weren't the only challenges, however. When Houlding, Burgun and kite-skiing cameraman Mark Sedon were dropped off near the South Pole on November 20, 2017, they were soon camped in the teeth of the worst storm they'd ever seen, delivering temperatures as low as -40°C, with 80kph winds. "Wind-chill temperatures were

"It's like riding a motorbike. Just a tiny throttle input and you've got an unbelievable amount of power"





Houlding and his team kite-ski from the South Pole and into the Transantarctic Mountains on the first-ever unsupported expedition to climb the world's most remote summit

Leo Houlding

into the -70°Cs ,” explains Houlding. “If you show your skin in that, you’ll have frostbite within 30 seconds. Game over.” The storm raged for four days.

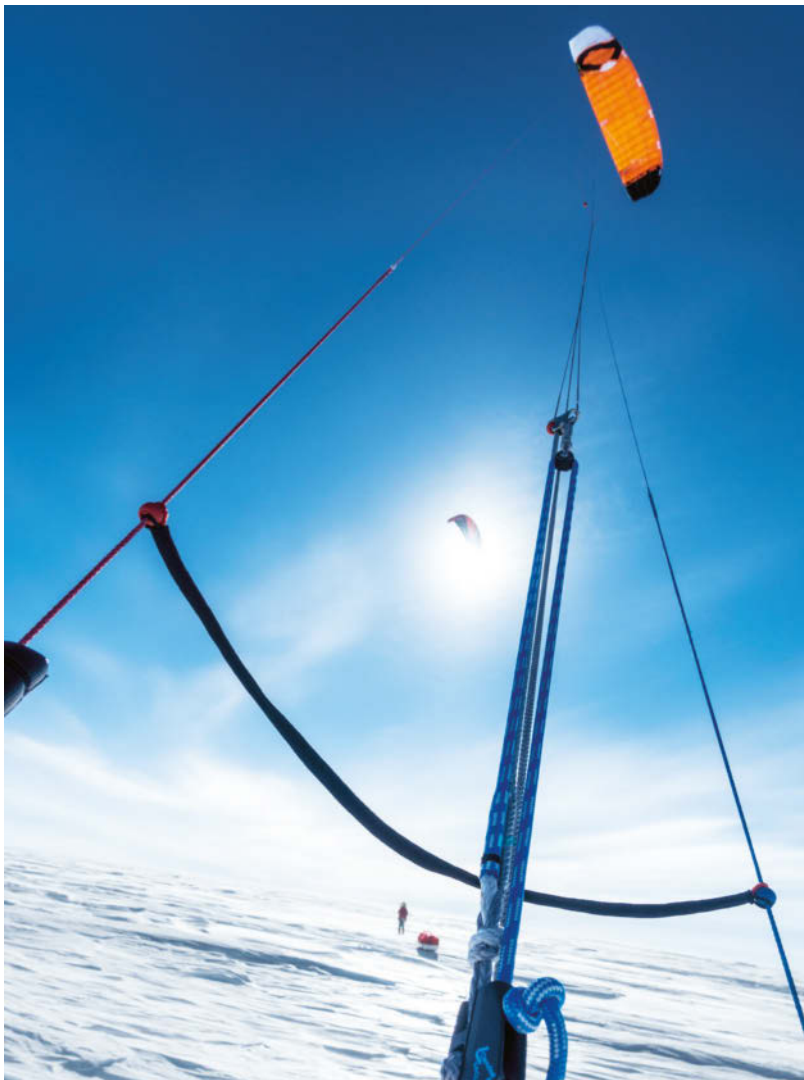
Antarctica’s winds may be legendary in their intensity, but their direction, at least, is usually easy to predict; something that the team was banking on. The continent has a system of katabatic winds, generated by gravity flow rather than weather pressure systems. As the cold air travels down slopes, it becomes denser and more intense, forming a reliable, ground-hugging pattern across the landmass. The three men put their faith in this colossal engine of air, but as their drop-off pilot commented while taking a sledgehammer to the lid of a frozen

fuel can, “Nothing is easy out here.” It was to become the team’s motto.

Here be monsters

The narrative of old-school polar explorers trudging across the ice to plant a flag for their empire is one of conquest. For Houlding, as a 21st-century polar traveller, this idea is replaced with a low-environmental-impact quest for perspective on our place in the world.

“I’ve learnt how humble you’ve got to be,” he says. “It’s not about world records or firsts. It’s just trying your hardest to achieve your goals while having respect for nature and the elements. We’re walking gently through, trying not to disturb the ogres that can devour you.” Antarctica is inhabited by many of these



Houlding’s team used kites of the sort developed for hydrofoil racing



metaphorical monsters and it was inevitable that Houlding’s team would eventually encounter one of them.

After a 16-day battle with bad weather, poor visibility and crashes, the team was far behind schedule. Houlding drew upon his polar coaching. “You want to finish ready to start,” he says. “Ending on your knees, frostbitten, is not the professional way.” The team worked to a 70-per-cent-capacity rule, keeping 30 per cent of their energy in reserve and reeling things in when they starting dipping into it.

However, when you’re traversing the world’s most hostile desert, pin-balling from exhilaration to the depths of fatigue, it’s hard to gauge that 70 per cent. Houlding was well past that as the trio kite-skied down a sheet of blue ice and towards the Transantarctic Mountains. Coming off the edge of the Antarctic

"I got violently yanked back towards a bottomless pit"



Less than a kilometre from the Spectre, after a gruelling 17-day approach by kite, Houlding's 160kg pulk broke through a snow bridge and fell deep into a crevasse. Thankfully, the knot in his leash caught in the lip of the hole, saving his life. Burgun descended into the icy depths to retrieve it

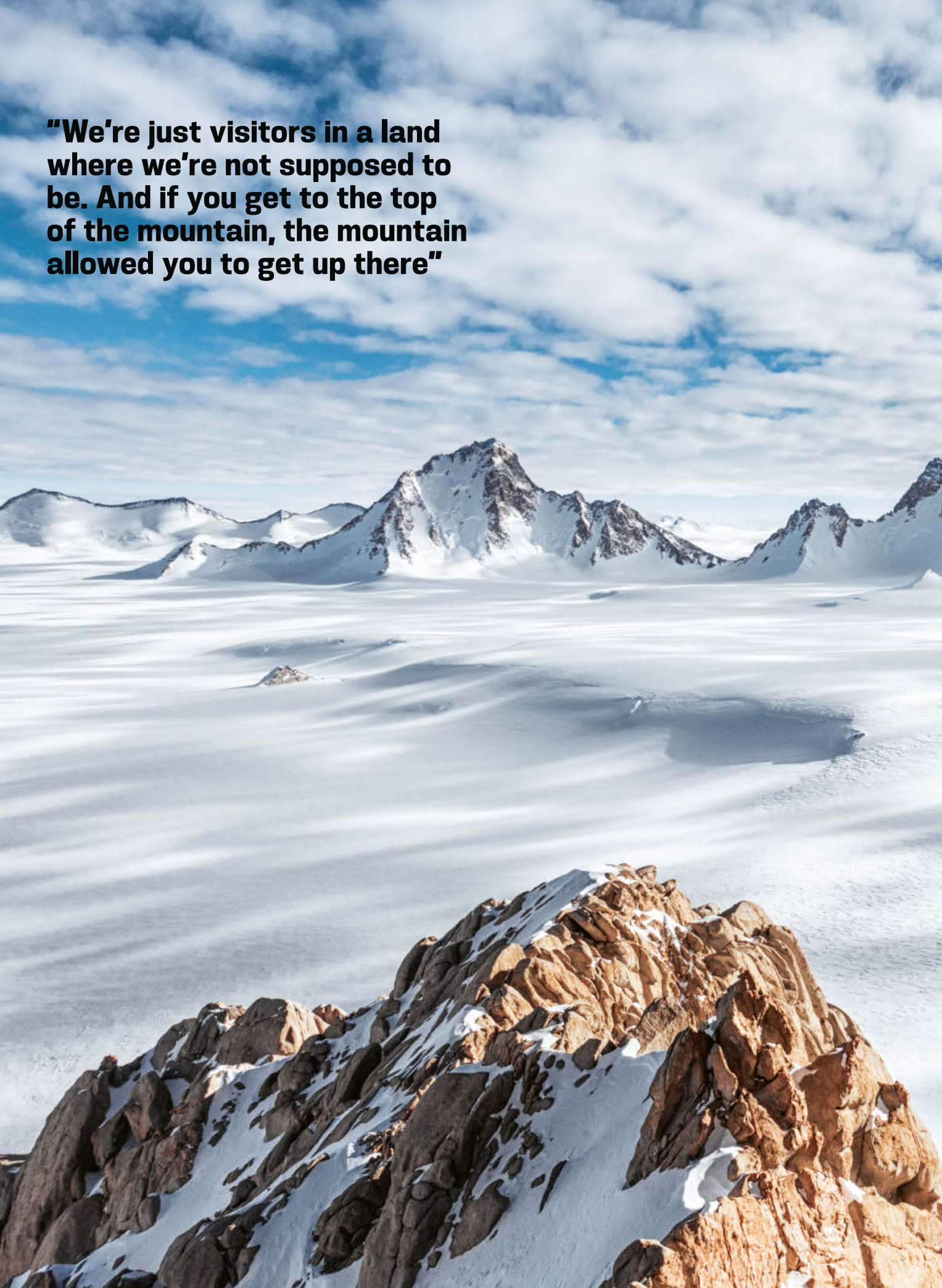


Burgun and Sedon begin the 1,400km homeward journey after 30 days in the deep field

Plateau, the wind strengthened as they descended. "We were already at 95 per cent capacity, in a massive storm, getting separated and into a serious predicament. We had to cut away the kites [which means partially detaching the kite to instantly lose power and regain control]."

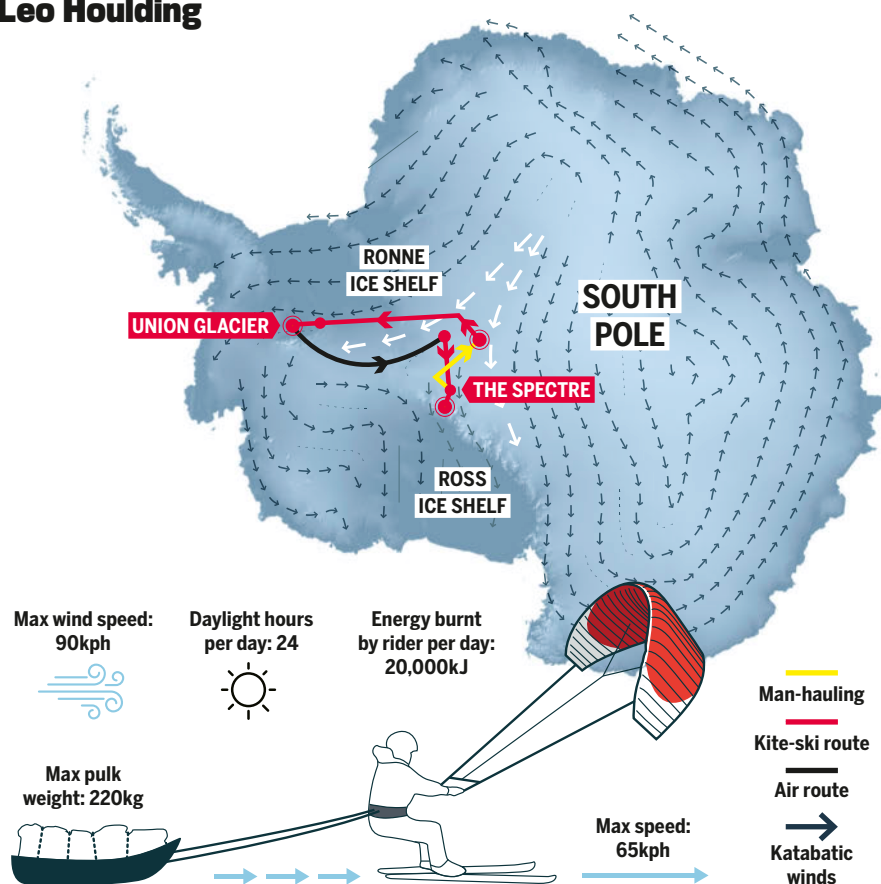
Before the journey, lacking detailed maps of the Antarctic terrain, Houlding had spent hours poring over Google Maps to plot a GPS route through heavily crevassed glacier fields. He could avoid the biggest 'house-eating' chasms by using ground-penetrating satellite imagery, but the Scott Glacier lay in their path, a chessboard of blue ice criss-crossed with hundreds of bottomless crevasses covered in unstable snow bridges. As they navigated the glacier, the team realised they'd strayed into its shattered heart and discovered how unstable the snow

"We're just visitors in a land where we're not supposed to be. And if you get to the top of the mountain, the mountain allowed you to get up there"





Sedon looks worried
halfway up the Spectre
as a storm front
approaches ominously



bridges really were. Burgun collapsed one by merely poking it with his finger. Chastened, the team gingerly switched their tactics to man-hauling, covering just 5km in six hours; something that would have taken minutes by kite. Once out of the glacier's centre, they relaunched their kites, but in a lapse of concentration Houlding missed a warning sign. "We were a kilometre away from the mountain and the last crevasse on the whole journey swallowed my pulk. I got violently yanked backwards by a 160kg load dropping into a bottomless pit," he says.

Fortuitously, the pulk wedged into a bottleneck in the crevasse, so Burgun was able to drill ice screws into the snow in order to take the load off and rescue his teammate. "That was serious – probably the most mortal hazard of the whole trip," says Houlding.

"At the summit ridge, a storm was coming. It was terrifying"

High as a kite

The 350km journey was supposed to take one week; it ended up taking 17 days, and the primary objective had yet to be achieved: scaling the mountain at the end of the world.

"Climbing is not about getting to the top at all – it's about the way in which you do it," says Houlding. To protect the pristine Antarctic environment, the team had travelled to the Spectre without bolts, hand drills or fixed ropes. "It's about rising to a challenge and accepting that you're willing to walk away from it, rather than trying to deface that challenge and make it safe." His teammates agreed that they couldn't impact on somewhere so pristine, "so remote that there's only been one other climbing team there, ever".

Realising the line of the south face was vertical portaledge territory, the team shifted their sights to climbing the north side's 300m snow gully and 300m rock face in one push. "It was complicated terrain," says Houlding. "Not sustained difficulty but small steps, like alpine bouldering, where you have 10-15m of difficult climbing." Handhold surfaces were punctuated by sections requiring ice axes on a mix of snow and rock. "It would take an hour to climb 12m, and if you fell there was a very real chance you'd break your leg." Then the weather turned.

"A storm was coming and it was truly terrifying. At the summit ridge, two hours from the top, we were thinking we should turn around, because it could take us 12 hours to get down. But we pushed past 70 per cent, well into the danger zone."

"It was the least joyous summit," Houlding says of reaching the top. "A feeling of: 'Yes, we made it. Now let's get the fuck out of here.' Our tents were little specks of red, a long, long way below."

Twenty-two hours after setting off, they made it back to those tents. Half an hour later, the storm whipped in, powered by 55kph winds. "It's like you're dancing with the mountain," says Houlding. "And if it doesn't want to play, don't force it, because the mountain always wins."

Going the distance

Houlding had shown that for explorers today, frontiers are more than untamed wildernesses, they're barriers in the mindset of how we tackle these environments. By blending high-powered kite technology with world-cup racing skis, he'd travelled much closer to the wind, massively extending the speed and range of a long-distance skiing expedition. "It's quite revolutionary to take modern action sport and bring it into the old-school context of massive expeditions," he says. His team saved themselves 350km of painfully slow man-hauling with this innovation.

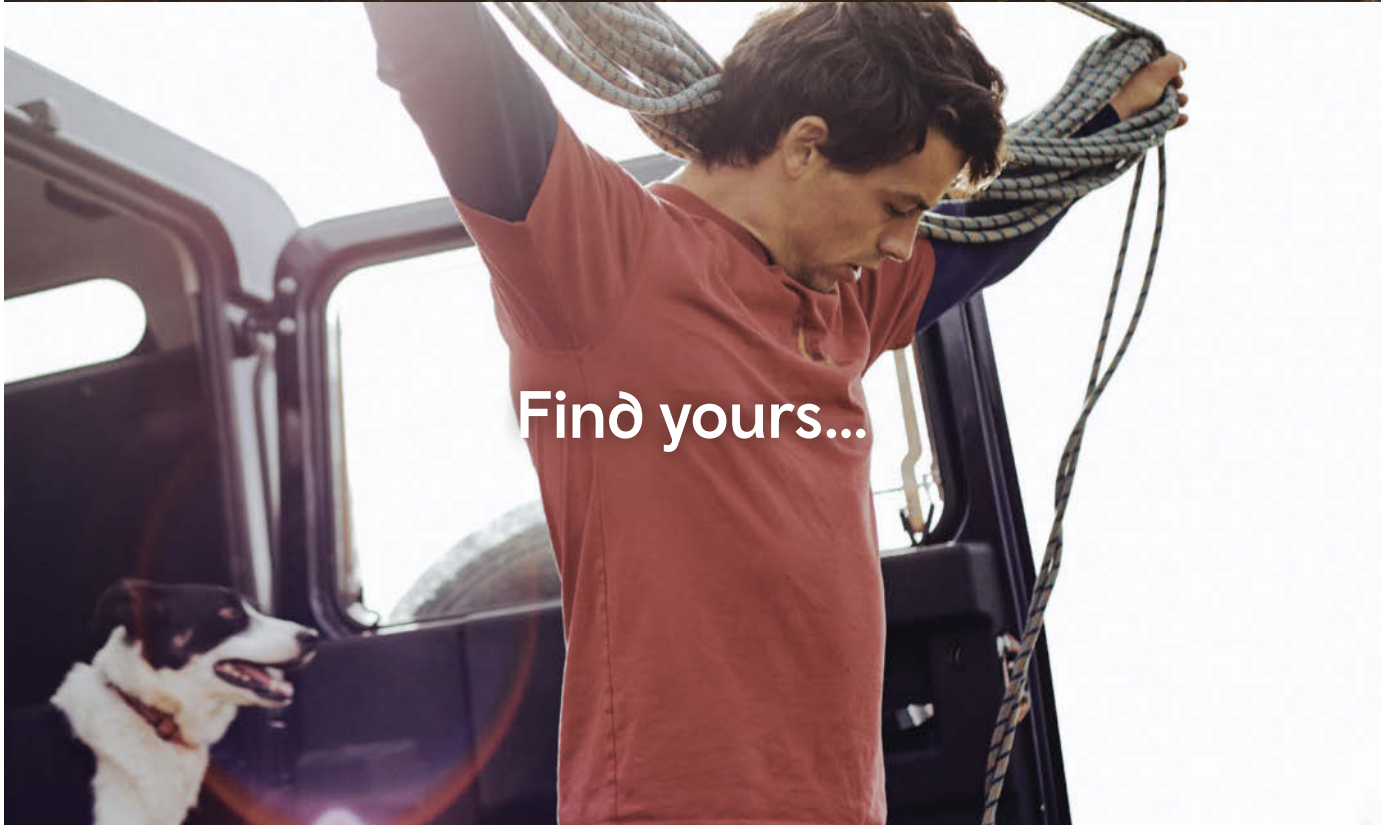
Relying on the wind did have its drawbacks, though. On the return leg, the three men found their vessels becalmed for a whole week, like sailors on a frozen sea. But frustration turned to wonder when they witnessed an incredible atmospheric phenomenon: "It was a parhelion – light refracting through perfectly hexagonal ice crystals in the sky – one of the most beautiful things I've ever seen. Then, at midnight, the wind came up and we covered 100km."

Forty-four days in, everything came together for a perfect day in which they glided for 200km. "It looked like a sea of diamonds, with channels of snow blowing like a river. You crossed them with sequins blowing past you for hours." For Houlding, the adventure had given him a life lesson. "It's knowing when to push hard and when to ease off – when to force it and when to go with the flow. We're just visitors in a land where we're not supposed to be, and if you get to the top of the mountain, the mountain allowed you to get up there."

Watch *Spectre Expedition – To the End of the Earth*, the film of Houlding's epic journey, at vimeo.com/ondemand/spectreexpedition



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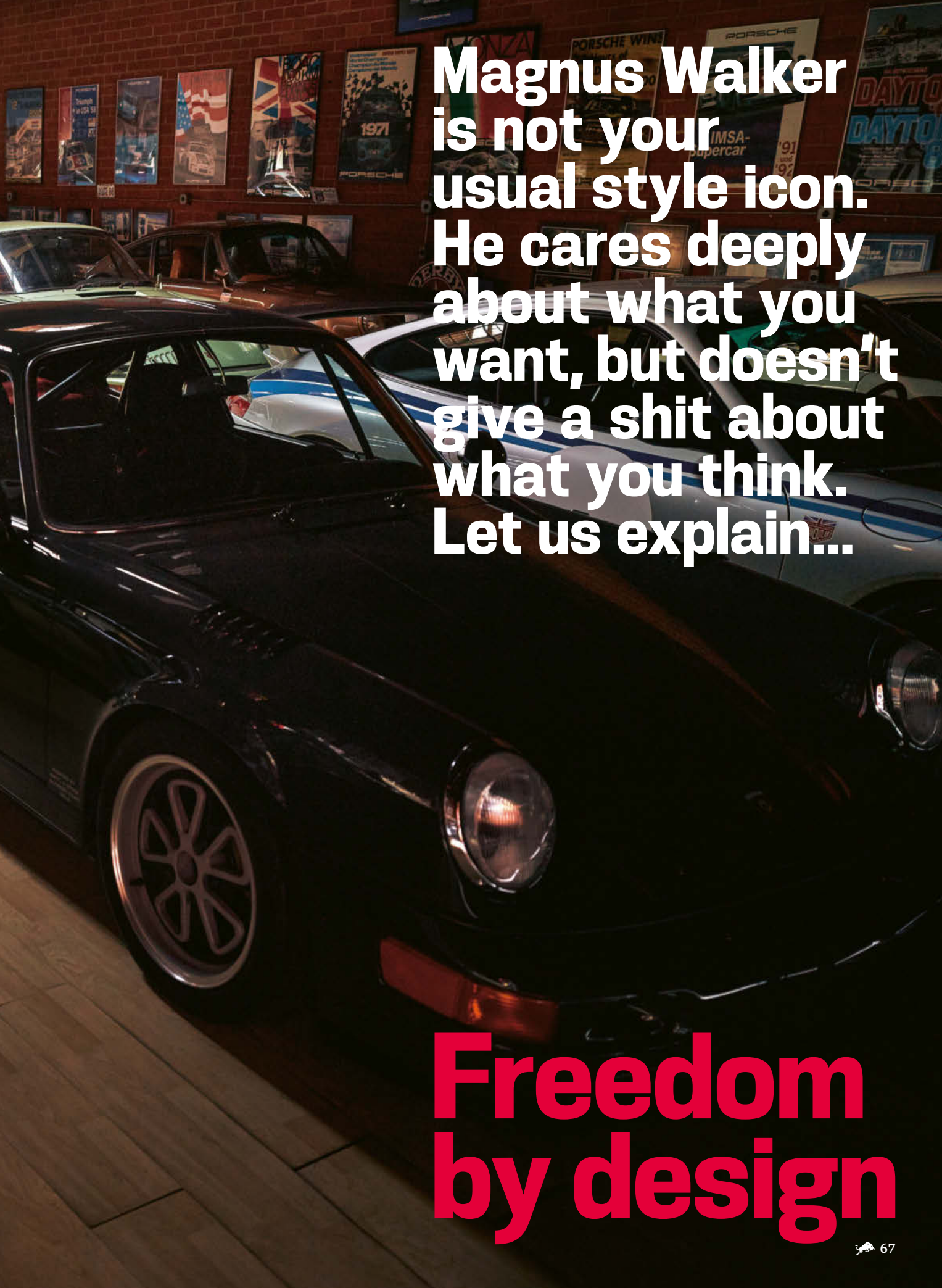
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"The car thing's, like, timeless," says Walker, who keeps his unrivalled collection of vintage Porsches in his downtown LA loft

Words **SCOTT JOHNSON**
Photography **JIM KRANTZ**

A dark classic car, possibly a Porsche 911, is parked in a museum. The background wall is covered with various racing posters, including one for the 1971 24 Hours of Le Mans and another for the 1991 IMSA SuperCar. Other cars are visible in the background.

**Magnus Walker
is not your
usual style icon.
He cares deeply
about what you
want, but doesn't
give a shit about
what you think.
Let us explain...**

**Freedom
by design**

Freedom isn't just a marketing ploy, it's an idea that Walker seeks to embody

The sun is about to set on Los Angeles. From atop the summit of the Angeles Crest Highway, Magnus Walker looks down on the distant lights of his adopted city. He's behind the wheel of his favourite Porsche – a 1971 911T with red, white and blue colour-blocking. The nearby mountains glow peacefully in the fading light and a warm wind blows across their barren hillsides. Walker checks the gears, the mirrors and his seatbelt. And then, as if he has been bitten, he jams his feet into the car's pedals with a sudden intensity.

All sense of calm disappears, replaced in an instant by overpowering momentum. Within seconds, the Porsche is roaring down the mountainside at around 150kph. Walker calmly leans to the side as the car howls through a hairpin turn. The Porsche seems to shudder slightly, threatening to tumble over the precipice, but Walker careens easily out the other side, like a surfer emerging from a perfectly tube-shaped wave. As if spurred on by this small triumph, he accelerates even more, the scream of the Porsche drowning out all sound as he powers down the highway's tight S-curves.

Magnus Walker, iconoclastic fashion designer and Porsche enthusiast, talks a lot about freedom. It's central to his biography as a less-than-perfectly-educated Sheffield lad who found success in the land of the free. The ethos of rough liberty is even built into the language of his latest company, Urban Outlaw. There is, admittedly, something curious about the juxtaposition: here's a man who made millions of dollars selling clothes to big corporations such as Disney and Universal Studios. At the same time, he has capitalised on his rough-hewn image, a highly stylised aesthetic that mixes dreadlocks, leather, denim and boots to create something very personal and authentic – a look that's marketable and raw.

And it works. Whether he's appearing on behalf of Porsche at an international marketing gig in Mexico City; signing autographs for fans at a conference in Portland, Oregon; or speaking at a TEDx Talk, Walker is a study in contradictions: a scraggly antidote to consumerism who is also a successful corporate brand unto himself. Which is why he thought it so important to show a visitor the drive along the Angeles Crest Highway. Here, it becomes clearer that the concept of freedom isn't just a marketing ploy, it's an idea that Walker seeks to embody. This twisting sliver of road, an arrestingly beautiful artery that takes you from the droning traffic of downtown LA and into the Angeles National Forest in less than half an hour, is his favourite place to drive – and he drives it like he means it.

In these moments, the thought he has given to his own manicured image begins to make a more pragmatic kind of

sense. The jeans and the leather jacket are comfortable, which allows him to manipulate the car's gears more easily, to take the Porsche into uncharted territories of speed and artistry, and to relax into his greatest passion. He casually takes one hand off the wheel at points, shakes his half-metre-long dreadlocks free with obvious glee, blusters at the cliffs that drop off outside the windows, and suddenly it's as if Urban Outlaw the brand has become manifest in the living person.

Walker grew up in a middle-class household in Sheffield, and at weekends he and his parents would visit the region's stately homes, with their smoking rooms, leather couches and elaborate stonework. He also did some cross-country running as a kid, and he used his mum's Singer sewing machine to stitch Iron Maiden patches onto his jeans. He dreamed of America, of *The Dukes of Hazzard*, Evel Knievel and *The Rockford Files*. He thought of himself as a lone wolf.

In 1986, he left Sheffield for the US, to take up a job as a youth counsellor for a project called Camp America. After stints in Detroit and New Jersey, he headed west to California, seeking "sex, drugs and rock 'n' roll". He sold factory seconds at a Gap outlet on the Venice boardwalk. At the time, vendors and artists were turning the beachfront into a creative laboratory, and Walker began experimenting with his own clothing designs. The feel was industrial hippy – the perfect aesthetic for someone who didn't fit neatly anywhere. He designed a "floppy Renaissance hat thing" that sold like hotcakes. "Not that I was a Renaissance fan," he says.

Pretty soon, he was buying Levi's jeans for 50 cents a pop, adorning them with wild, colourful patches of paisley, satin and leather, and reselling them at a huge profit. In 1992, he used the proceeds to buy his first Porsche 911 – a dream come true for the man who had, at the age of 10, written a passionate fan letter to the car company. The market loved Walker's innovations, and soon Venetian Paradise – the company he ran with then-girlfriend Linda Lagasse – grew. The couple supplied wholesale shipments to stores on Melrose Avenue, then Disneyland came calling, followed by theme park Six Flags Magic Mountain and Universal Studios. Walker's clothing was also stocked in Hot Topic, a chain that started with five locations but expanded to more than 600. Celebrities were into his look, too, and he toured with Alice Cooper. "I found something that I could actually do, that I'm pretty good at with no education, and that I'm actually making money on," says Walker.

Since those days, he's made a lot more money and bought many more cars. Walker has 13 Porsche 911s sitting in the garage of a 2,400sq-m loft space in LA's Arts District – a place that has also served as his home, a working TV-and-movie set, the seat of his business empire, and the HQ of his brand.

On an October morning outside those offices, Walker watches excitedly as a cherry-red 1979 Lotus Esprit slides



Walker's distinctive look – dreadlocks, beard and all – have become an effective trademark for him and his brand



Walker pilots his 1971
Porsche 911 on the
Angeles Crest Highway

slowly off the ramp of an 18-wheeler. The car is immediately recognisable as the same kind as James Bond's ride in *For Your Eyes Only*: a sleek, angular machine that still oozes sex, lava lamps and '70s chic. On closer inspection, some of the vehicle's subtler qualities emerge: a levered dashboard with an array of knobs and switches, a wooden-handled gear-stick, and leather seats scuffed just enough to make you wonder if 007 actually sat here. Walker saw the car online and bought it sight-unseen. Once the Lotus is sitting comfortably on the street, he hops inside and fiddles gently with the stick. "I'll just take a quick spin around the block," he grins. The Lotus emits a healthy roar, accelerates and vanishes around a corner.

Walker doesn't really care what you think. Or maybe that's just what he'd like you to believe. A kind of studied nonchalance swirls around him. It's hard to put your finger on it, because the elements of his brand, his various companies and his personal aesthetic all seem to merge and flow on top of each other. With Walker, an explanation of how his fashion business led to the discovery of his loft becomes a treatise on the value of not giving a shit about others' opinions, which is a kind of personal ethos for him. After all, he and his wife Karen followed their gut instinct and bought their building in 2000, long before the LA cognoscenti appreciated the massive value that downtown had to offer. The ground floor became a workplace for Serious Clothing – one of Walker's fashion brands – and eventually a new idea, Urban Outlaw.

**"You can't
manufacture
passion. You
can't put it on a
bottle of water"**

The space also turned out to be a massive revenue-generating machine. An *LA Times* reporter featured it in a lengthy piece about loft gentrification in the city. Then a Hollywood producer called, asking to use the space to film a Missy Elliott music video. Producers soon took over. The whole experience was pretty awful, but they got paid. "A shitload," he clarifies.

They rented it out again. And again. Soon, they decided they'd make a lot more money if they turned the place into a rental studio. They moved out and never moved back in. They hosted the Bruce Willis movie *The Whole Ten Yards*, *America's Next Top Model*, *American Idol*, two six-week reality TV shows, and every US crime drama you can name: *CSI: New York*,



Monk, Without A Trace, 24... Then there were the commercials for fast food, alcohol, and mobile phones. “We were probably filming 120 to 150 days a year,” he says. “It became a one-stop film location. If we hadn’t taken that leap of faith and moved out, we’d have never gone into the film business.” The money flowed. “It enabled me to buy more Porsches than I ever thought I would own,” Walker says. Meanwhile, that loft? It’s worth about 10 times what he paid for it.

Walker’s outlook on life is fundamentally pragmatic: if something works, use it. If it’s a high-performance car, drive it. Clothes? Just wear them. The objects in our lives were meant to be handled. Standing on the lower floor of his loft, Walker strokes the handsome black leather jacket hanging on his broad shoulders, as if to drive this point home. It’s not an Urban Outlaw jacket, he says, or even one made by Serious Clothing. It’s Ralph Lauren, and he found it in a store and bought it on the spot, even though he knew it might raise eyebrows. “Fuck it,” he remembers thinking. “I’m buying this.” Why? Because it had the right touches. It was light. It felt used. It was comfortable.

He looks around and gestures at the ceiling. The same things could be said for the building we’re standing in right now; the rooms are refurbished, yes, but they’re also burnished with age, and the smell

of leather, smoke, tar and cement seeps through. Or take the Signature Series steering wheel Walker created with MOMO, the company founded by Italian racing-car driver Gianpiero Moretti: the wheel is weathered and torn and a bit rough, but it feels good on the hands. “How does this tie into fashion?” asks Walker. “Well, it’s just kind of the elements. We were doing hand-distressed leather jeans and patches, and washing things down to make them look old. Nothing really new about that. But no one had done it with a steering wheel.”

Walker says the key to everything – the fashion, the building, even the Porsches – is that he’s found a way to make them all his own. How? By making sure his ‘used and abused’ aesthetic soaks into whatever he touches. “Dirt don’t slow you down,” he says. It’s a marketing slogan, sure, but it’s also true.

He credits his parents partly for this, even though, when he was a kid, Walker had no interest in the majestic homes they dragged him to see. “Thirty years later, having been in LA where nothing is more than 100 years old, the first thing I want to do when I go back to England is look at 500-year-old stately homes and castles,” he admits. The top floor of his LA loft, with its scuffed leather couches and carefully peeling paint, reflects this appreciation for the historical authenticity of objects. And so it goes with Walker’s Porsches, too.

Halfway down the descent of Angeles Crest Highway, Walker spots a souped-up black Maserati ahead. With a deft flick of his wrist, he darts into the other lane and passes it.

Walker has a pragmatic outlook on life: the objects in our lives were meant to be handled

Within seconds, he has left the Italian beast behind and is once again careening around the road’s tight curves with a barely contained abandon, a peaceful smile etched on his face. “You can’t manufacture passion,” he says. “You can’t put it on a bottle of water and go, ‘Here’s some Porsche passion.’”

A few years ago, Walker and Karen got tired of maintaining the clothing line. The filming also began to dry up. They had coasted for a while, but now it was time to try something new. “We felt like we were hamsters on a treadmill, doing something that was no longer creative or inspiring,” he says.

And so that chapter of their lives came to an end. But soon after, Walker heard from Tamir Moscovici, an Israeli-born filmmaker and fellow car fanatic who wanted to make a movie about the Brit’s unlikely success as a fashion entrepreneur and Porsche enthusiast. Moscovici’s 32-minute documentary, titled *Urban Outlaw*, premiered at the Raindance Film Festival in London in September 2012. Since its release, Walker has turned his lifelong passion for Porsche into another revenue monster. He has travelled all over the world, working on car-related stuff with Porsche and various other companies. “The fashion door closed,” he explains, “and the Porsche passion – or hobby, as I call it – opened.”

Walker is now 52, and the man who has proudly never cut his hair, never had a real job and, as he proudly declares, “never gave a fuck what other people thought” is flowering gently into the latest phase of his life. There’s a lot of cussing when Walker is around, but it’s good-hearted and, to be honest, painfully earned: four years ago, he lost Karen to a long battle with alcoholism, then a running accident left him immobilised in a wheelchair for eight weeks.

These days, Walker calls himself bi-coastal, sharing his time between his old haunts in LA and his girlfriend’s smaller – but, he says, no less satisfying – apartment in New York. “I’m still rock ‘n’ roll,” Walker proclaims. “My hair is thinner and my beard’s curling, but I still like to wear stuff that I’m comfortable in. To me, it’s a second skin. I wear the same thing every day for, like, a year until it’s worn out. I’ve got three pairs of the same jeans, for example.

“But my tastes have matured as I’ve gotten older. My audience, the people who follow what I do, spans everything from teenagers to guys in their seventies. The car thing is, like, timeless. You’ve just got to be comfortable in your skin.”

The next chapter, Walker says, is to design a “small, punchy 12-to-18-piece line of clothing”, something that someone else could manufacture. He reaches into his pocket and pulls out a Hot Wheels toy Porsche that he carries around with him. Scratched and worn, it’s a relic of his childhood passion for cars. And it’s with him always – the weathered soul of the urban outlaw.

magnuswalker911.blogspot.com

RAB Mantra jacket, rab.equipment/uk
COLUMBIA OutDry Ex Reign jacket, columbiasportswear.co.uk
ARC'TERYX Russet pants, arcteryx.com
MONTANE Signature beanie, montane.co.uk

GIMME SHELTER

When the storm comes, do you seek cover or embrace the elements?
With today's hiking gear, you can do both. Kit up and get out

Photography BEN READ Styling SARAH ANN MURRAY





HELLY HANSEN Odin Stretch insulated jacket, hellyhansen.com
ARC'TERYX Brize 32 backpack, arcteryx.com
Wool beanie, stylist's own

Layers are vital, but one is often overlooked: the outer shell. Keep waterproof trousers packed and on standby for when the sky caves in. And a backpack cover is essential – rain doesn't only destroy your supplies, it's heavy to carry



ARC'TERYX Beta SL Hybrid jacket, arcteryx.com
ADIDAS TERREX Stockhorn hooded jacket, adidas.co.uk/terrex
PATAGONIA Torrentshell pants, eu.patagonia.com
VOLCOM Full Stone beanie, volcom.co.uk

THE NORTH FACE Thermoball hoodie, thenorthface.co.uk
MONS ROYALE Bella Tech Hood base layer, eu.monsroyale.com
47 BRAND Los Angeles Dodgers Brain Freeze Grey Cuff beanie, hatstore.co.uk
EAGLE CREEK Wayfinder Golden State-print backpack, eaglecreek.eu



Choose your jacket wisely. A windbreaker is light, but it gives minimal water resistance. If you pick a waterproof, ensure it's breathable to draw out sweat. For a cold-weather trek, try a three-in-one with a detachable thermal inner fleece



COLUMBIA Titan Trekker jacket, columbiasportswear.co.uk
 MARMOT Minimalist jacket, midweight Megan hoodie and heavyweight Nicole tights, marmot.com
 ARC'TERYX Beta SL Hybrid jacket, arcteryx.com; STANCE Fluorite Hike socks, stance.eu.com
 MERRELL Choprock hiking shoes, merrell.com

Don't get cheap with your socks: keeping your feet warm and comfortable is a priority. Extra toe and heel cushions will pay for themselves, as will good arch supports. And be sure to carry extra pairs – nothing is more demoralising than wet feet

MONTANE Ajax jacket, montane.co.uk
ADIDAS TERREX Liteflex pants, adidas.co.uk/terrex
COLUMBIA Street Elite 20L Sling pack, columbiasportswear.co.uk





MARMOT PreCip Eco jacket and Kompressor backpack, marmot.com; COLUMBIA Women's Altitude Tracker™ hooded jacket, columbiasportwear.co.uk; FALKE Long Sleeved Shirt Warm base layer, falke.com; ARC'TERYX Sigma SL pants, arcteryx.com
MONTANE Windjammer beanie, montane.co.uk; SMARTWOOL limited-edition Chup socks, smartwool.com
THE NORTH FACE Women's Verto S3K II GTX boots, thenorthface.co.uk; VSSL First Aid, fvssigear.com

The biggest mistake when buying a backpack is getting one that's too large and heavy. Compression straps ensure that even if the pack is underfilled, everything is snug and balanced. Also go for easy-reach flask pockets or a hydration reservoir port



MONTANE Ineo Pro pants, montane.co.uk
STANCE Chickadee all-mountain socks, stance.eu.com
HOKA ONE ONE Sky Arkali hiking shoes, hokaoneone.eu

A man with dark, curly hair and a beard is hiking through a forest. He is wearing a dark blue quilted jacket with orange accents, dark blue trousers, and black hiking shoes with green accents. He has a black backpack and is leaning against a large, moss-covered tree branch. The forest floor is covered in green moss and fallen leaves. In the background, there are more trees and a rocky, mountainous landscape under a cloudy sky.

MONTANE Icarus Flight jacket and Trailblazer 30 pack,
montane.co.uk; RAB Nexus mid-layer jacket, rab.equipment/uk
PATAGONIA Torrentshell pants, eu.patagonia.com
MERRELL Choprock hiking shoes, merrell.com

Sophie wears JACK WOLFSKIN JWP Shell jacket, jack-wolfskin.co.uk; ODLO Performance Blackcomb long-sleeve base layer, odlo.com
 HELLY HANSEN Odin Muninn pants and Loke Rambler boots, hellyhansen.com; VANS Crosstown backpack, vans.co.uk
 MARMOT CC Girl Hat beanie, marmot.com. Christian wears COLUMBIA Windell Park hooded jacket and Maxtrail II pants, columbiasportswear.co.uk
 ORTOVOX 150 Cool Logo T-shirt, ortovox.com/uk; SALOMON Outpath GTX hiking shoes, salomon.com; OSPREY Talon 33 backpack, ospreyurope.com



Your hat is your BFF. Go beanie in cold weather, wide-brimmed in the sun and rain. Your second best buddy is your jacket's hood, preferably with a sculpted peak and adjustable face. Forget a fur rim – it'll only soak up rain



JACK WOLFSKIN Arctic Road pants, jack-wolfskin.co.uk
 STANCE Chickadee socks, stance.eu.com
 ADIDAS TERREX Free Hiker shoes, adidas.co.uk/terrex

Hair and make-up: Jess Kordecki. Styling assistant: Rosie Farnworth
 Models: Christian Lambelin @ Select, Sophie Hellyer @ W Model Management
 Thanks to Visit Wales for its location support; visitwales.com





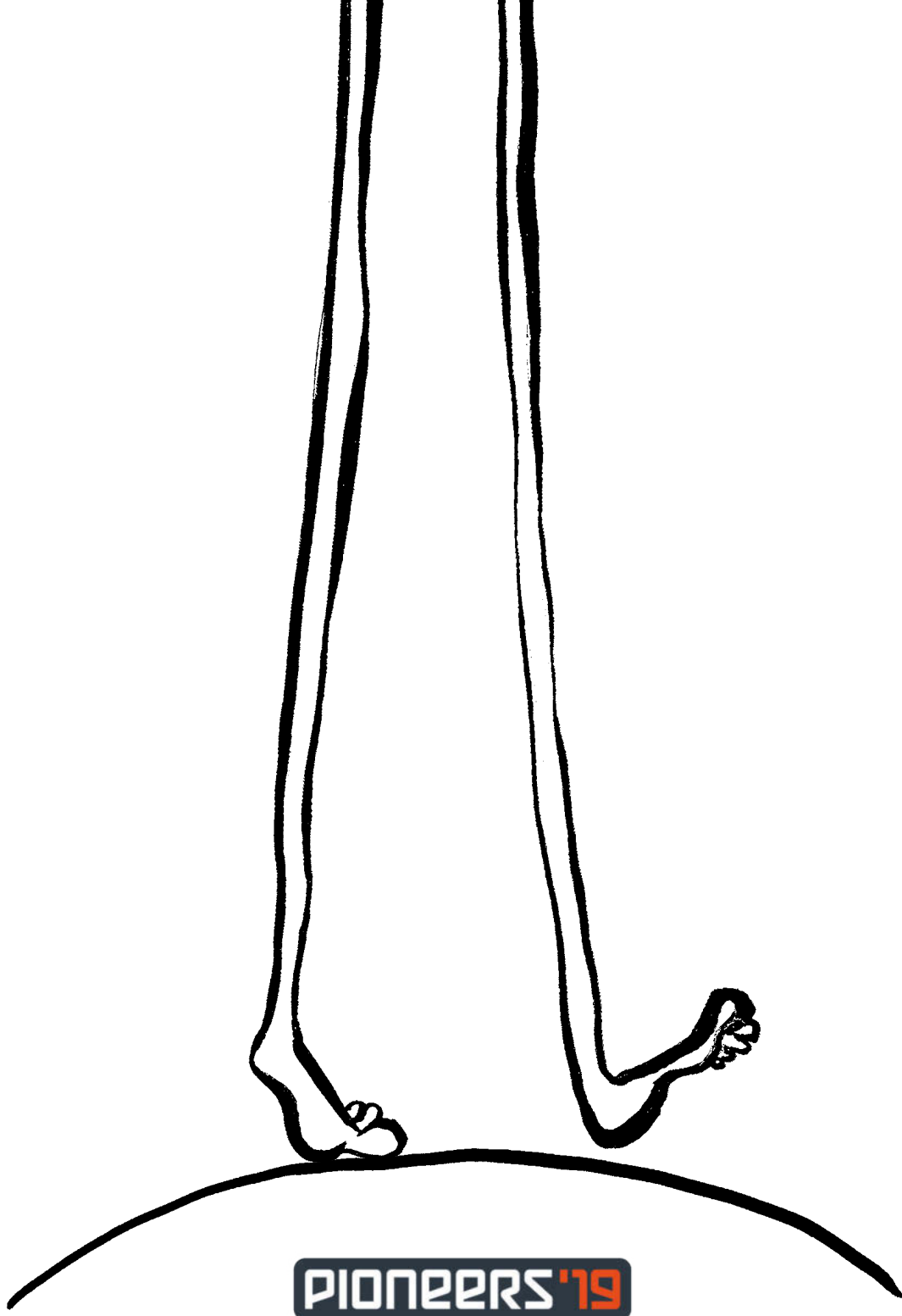
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guide

NO ORDINARY RIDE

Enjoy a unique MotoGP experience in Catalonia, including a day on the track with Dani Pedrosa

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This month, Red Bull TV takes you trackside for the best in racing – on two wheels and four

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PUT A RING ON IT

From drag racing to the obstacle course race from hell, mark these dates on your calendar

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FISSURE KING

Dive between tectonic plates in the clear glacial waters of Iceland's Thingvellir National Park

PAGE 86

Do it



Tarquin Cooper swims between the North American and Eurasian tectonic plates at Iceland's Silfra fissure

SILFRA FISSURE

CONTINENTAL DRIFTING

Iceland is the only location on the planet where you can dive between tectonic plates. Tarquin Cooper dons a drysuit and ventures into the chasm

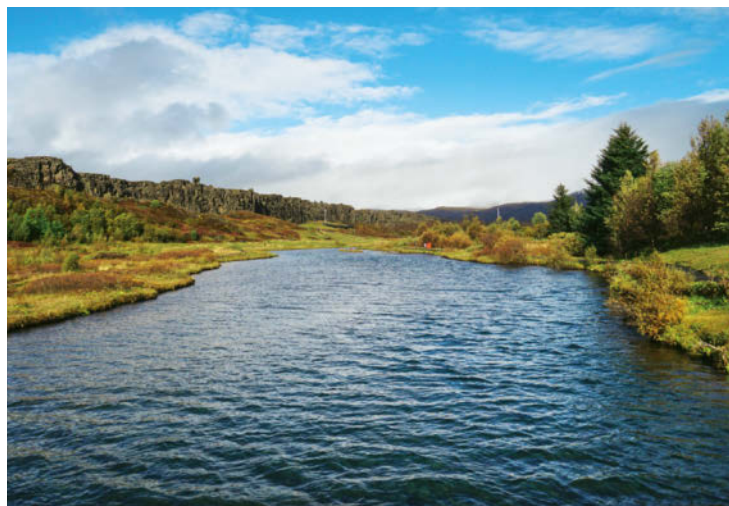
I am 10m down, floating between two steep walls of volcanic rock in an underwater canyon along the fault line of the Mid-Atlantic Range. The only sound I can hear is the exhalation of my breath. In my pressurised drysuit, I feel more like an astronaut than

a diver, a feeling enhanced by the deep-blue colours of the water, which seem to belong to another world. I could be floating in space.

Ahead, the chasm narrows to just a couple of metres – this is the point in the dive where the continental plates are at their



Cooper (right) and dive guide Enno Ackermann



The fissure lies beneath a channel in the UNESCO-listed Thingvellir National Park



Final checks complete, the dive team prepare for their intercontinental plunge

closest. I pause as I squeeze through, bridging the gap between the North American plate on one side and the Eurasian on the other, and savour one of the most awe-inspiring views to be had underwater: the Silfra fissure.

Iceland isn't an obvious diving destination; it's more famous for its hot springs, thunder-clapping football fans and unpronounceable volcanoes (try Eyjafjallajökull – the one that erupted in 2010, causing air-travel mayhem). Settled by Vikings and ruled by Norse gods, the landscape is wild, mountainous and rugged.

However, it's below the waterline where things get really interesting. Just 50km east of

“The water is so clear I can see the entire corridor. It's magnificent”

Reykjavík is the UNESCO World Heritage site of Thingvellir National Park, where a small channel of glacial meltwater opens up into the Silfra fissure, a split between the tectonic plates, created in the aftermath of a series of earthquakes in 1789. It's a geological wonder – and the only place in the world where you can dive between continental

TRAVEL TIPS

IN THE LAND OF FIRE AND ICE

Eat sheep's head, visit the spot where Brienne defeated The Hound, and gawk at some penises. But whatever you do, don't call an Icelandic horse a pony



Reykjavík is a three-hour flight from London. In summer, algae grows in the Silfra fissure, further colouring the water



DO

EAT SHEEP'S HEAD

Try *kjammi og kók*, or sheep's head, at Reykjavík's BSÍ coach station. Not for you? Perhaps the ammonia-infused fermented shark, then? Eat at food halls – you'll pay half as much as you would at a restaurant – and finish your meal with some liquorice ice-cream (it's an Icelandic thing).

GO LOCATION SPOTTING

Visit the site where The Hound met his nemesis, Brienne of Tarth. Many other scenes from *Game of Thrones* were also filmed on the island.

FIX EYES ON A PHALLUS

Reykjavík has a museum dedicated to penises, but this is probably best kept for when there's nothing better to do. Playing golf under a midnight sun at one of Iceland's 65 lava-field courses might be a more palatable pastime.



DON'T

BUY BOTTLED WATER

The stuff that comes out of the taps is pure volcanic mineral water.

CALL THE LITTLE HORSES 'PONIES'

Icelanders get very upset if you do. Their horses are famous for their rugged character and unique trotting gait, or *tölt*.

GET YOUR BEER FROM THE SUPERMARKET

It will be non-alcoholic. Beer was only legalised in 1989 – on March 1, now celebrated as Bjordagur (Beer Day) – and you can only buy it from state-run stores or at duty free.

TAKE THE PLUNGE INTO THE DEEP FREEZE

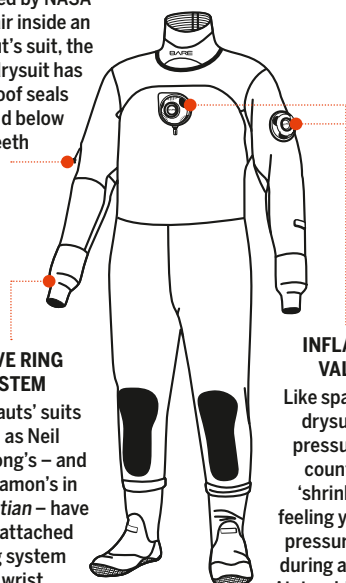
Diving in cold water requires a different set of skills than it does in warm water. For starters, you need to be able to use a drysuit

THE DRYSUIT

Not just a waterproof layer, the drysuit has more in common with a spacesuit than with a wetsuit. Many of its features are derived from NASA innovations

WATERPROOF ZIPPERS

Developed by NASA to hold air inside an astronaut's suit, the zip on a drysuit has waterproof seals above and below the teeth



GLOVE RING SYSTEM

Astronauts' suits such as Neil Armstrong's – and Matt Damon's in *The Martian* – have gloves attached via a ring system on the wrist. Drysuits also have this feature, mostly used by cave divers. At Silfra, neoprene gloves are worn

INFLATOR VALVE

Like spacesuits, drysuits are pressurised to counter the 'shrink-wrap' feeling you get as pressure grows during a descent. Air is added via the inflator valve to counter the problem



CALM UNDER PRESSURE

HOW TO TACKLE A TECTONIC SCUBA DIVE

1. Do the PADI drysuit course beforehand. It takes two days, but the more you can practise in a suit the better.
2. If pockets of air get trapped in your boots, you can flip and float to the surface. Learn to escape by performing a tuck.
3. As the name suggests, you'll stay dry inside

a drysuit, so remember that it's not the wisest idea to go for a pee while underwater.

4. Prepare for the cold-water shock around your face. Breathe, don't panic – it will pass.

5. Keep your hands as still as possible. Any movement will speed up the loss of heat.



"Like floating in space" – Cooper is spellbound by Silfra's crystal-clear waters

plates. "It's the clearest water you have ever seen, anywhere," says my dive instructor, Enno Ackermann.

It's also bloody cold, never more than a few degrees above freezing. For this reason, anyone who wants to scuba dive at Silfra must wear a drysuit (a diving suit that prevents water getting inside) and have the drysuit certification (which can be earned over a weekend). Before putting on the suit, I pull on thermal leggings, a base layer and a fleece onesie. Then the dive team helps me into the suit, pulling the zips tight, checking the seals and fitting the air tank. With weights stuffed into my pockets like gold bars, I'm carrying about 25kg – the 200m walk from the car park to the entry point is hard work.

At the water's edge, I put on my fins over my drysuit boots and rub spit into the mask to prevent fogging. Then it's regulator in mouth, final checks, and I step into the void – and start sinking rapidly. For the first few minutes, I blast air in and out of my system, trying to find that balance of neutral buoyancy – and failing. When I'm finally able to relax and open my eyes, the reward is immediate. The water is as clear as fresh

mineral water – which is near enough what it is, filtered over decades through volcanic rock.

I follow Enno into the depths, a few metres behind. The fissure opens up into a section known as 'the Cathedral', a narrow, steep-walled 100m-long corridor. The clarity of the water allows me to see its entire length. It's magnificent, and I'm genuinely humbled. Boulders strewn across the floor seem to hint of ancient ruins. A shard of light catches the sparkle of a rainbow trout, which darts past in a flash of colour.

I'm so excited by the dive that I barely notice the leak in the rubber cuff around my neck, and water begins to seep inside. It's unpleasant, but I figure I'll warm up later. It's only when I get out of the water that I realise how cold I am, and for the next hour I sit shivering in the car with the heating on max. Concerned, Enno asks if I'm sure I want to dive a second time. Hmm, let me think: dive the coolest place I've ever dived one more time, or stay in the car? Through chattering teeth, I splutter my reply.

"OK, great," he says. "I'd better find you another suit."

originaldiving.com



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FIT **S** **B** **O** **D** **Y** **A** **N** **D** **M** **I** **N** **D**

Do it

EXPERIENCE MotoGP

YOU TOO CAN DO THIS

Worn kneepads are a badge of honour for motorcycle racers. Former professionals Sete Gibernau and Dani Pedrosa show us their cornering technique on an exclusive biking weekend with private tuition and VIP access to the MotoGP Gran Premi de Catalunya

ON YOUR KNEES
IN 10 EASY STEPS

A private racing circuit in Spain, bikes tuned perfectly. Tarmac as flat as a pancake, with tons of grip. Two coaches who were at the top of MotoGP for years. So now it's your turn. Your knee must touch the ground and gently graze the unpleasantly new pads, making them look like they should. Sete Gibernau explains how you get there...

1 Try to be calm and stay that way throughout the ride. Don't clutch the handlebars with all your strength – there's no need to use force. Be conscious of your breathing.

2 Even when you're tilting, keep your head up straight. Your eyes should be parallel to the ground beneath you. That's the only way you can judge a corner correctly.

3 We'll start with a left-hand corner. Most riders find this easier, as the hand you accelerate with is on the outside, giving more room for adjustments with your elbow.

4 Coming into the corner, put the front of your feet on the footrests as you brake. This way, you avoid undesired contact between the sole of your foot and the ground, and your toes won't get sanded.

5 After the braking phase, bring your centre of gravity inwards by shifting your weight, and, with your knee bent, hang onto the tank. Do this in a single, fluid movement. Take it easy.

6 Bend the inside leg and move it outwards. Feel free to go a little overboard to start with.

7 Curve your body back slightly. This way, you automatically get low on the bike, making it easier for your knee to come into contact with the ground.

8 From this point on, braking is a big no-no. Come into the corner and look a little further ahead of the end of the bend than you would instinctively.

9 Adjust how far you tilt with the throttle hand. If you step off the gas a bit, you tilt inwards. If you ramp it up, the bike will straighten itself. This phase requires practice and good feel.

10 Sooner or later you'll be scratching your knee. Well done! Keep your cool (see point 1) – remember you need to come out of the corner, too. Step on it and the centrifugal force will straighten the bike. Now repeat this all day long...



GETTY IMAGES

Our coach shows us how it's done: Dani Pedrosa at the TT Circuit Assen in the Netherlands in 2018

**“I’ve had plenty of
adrenalin surges in
my life, but nothing
beats the Ducati X2”**

**Pillion passenger
Kevin Richardson**



Do it

Hold on tight:
motorcycle fan
Richardson (rear)
on the Ducati X2



PASSENGER NOTES

“WOW, WOW, WOW! TOTALLY INCREDIBLE!”

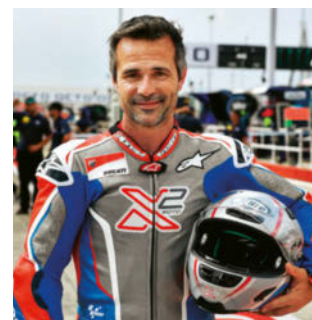
What does it feel like to ride pillion on a two-seater MotoGP bike – the very one used for Destination Red Bull? Regular guy Kevin Richardson has experienced it. Here, he reveals all...

THE RED BULLETIN: Let's not beat around the bush – what is it like?

KEVIN RICHARDSON: What's it like? Wow! Wow! Wow, wow, wow! It took me ages to calm back down afterwards. Believe me, I've had plenty of adrenalin surges in my life, but nothing beats the Ducati X2.

Seriously, is it really that amazing?

It's the best thing there is, by far, if you're even just a little bit crazy about bikes. As far as I'm concerned, these riders are artists. Anyone can learn to ride



THE PILLION RIDER

Kevin Richardson, 44, comes from South Africa, is a motorsport fan and zoologist, and is known back home as 'the Lion Whisperer'. He sees parallels between MotoGP bikes and big cats: "If you don't respect them, you've lost. But they're a soft touch in the right hands."

**DESTINATION RED BULL****THE RIDE OF A LIFETIME**

You've read what it's like to climb onto a MotoGP bike with a racing legend. Now experience it for yourself. Here's how to go about it...

a motorbike, but not to tilt or accelerate like that [to about 250kph] or brake like that. It's more than 1bhp per kilo!

What's going on in your head as it's happening?

Your brain plays tricks on you. That starts before you even get on the bike. Before my first go, the doctors from the Clinica Mobile [the medical station at every MotoGP race] told me I wouldn't be getting on the bike if I couldn't get my pulse under control.

But you did. In fact, it's something you've done twice...

Yes, it was totally incredible. My first go was on Phillip Island, a famously quick circuit in Australia. But it rained. You can't begin to explain to a normal person what a MotoGP bike is

"It's not a question of whether I'd do it again; it's a question of when I can"

capable of and how far it can tilt, even in the rain. Even if you could, nobody would believe you.

Then came your second ride. This time, dry...

It was, in Misano. It was the best thing ever. You've got to do it.

So you'd do it again?

It's not a question of whether I'd do it again, it's a question of when I can.

What advice do you have for anyone riding pillion?

Enjoy every single second. It doesn't get any better than this.

YOUR TRAVEL GUIDES

DANI PEDROSA needs no intro to MotoGP fans. The three-time world champion (125cc and 250cc) was at the top of the racing world for 18 years. The Spaniard didn't

just win hearts with his riding style but also with his tenacity at overcoming setbacks. He brought his active career to an end last November, after 295 races, only to take a job as a test and development rider at KTM.



SETE GIBERNAU grew up with motorbikes. His grandfather, Don Paco Bultó, founded Bultaco motorbikes in 1958. Sete entered the 250cc world championship in 1992,

the premier class in 1997, and came second to Valentino Rossi in the 2003 and 2004 MotoGP World Championships. After retiring, he became an advisor to Pedrosa, but recently announced a comeback in MotoE, the electric motorbike world championship.



Day 3: on the pillion of a MotoGP two-seater

YOUR DESTINATION RED BULL TRIP HIGHLIGHTS

Red Bull MotoGP Experience,
June 14-16, 2019

A day of MotoGP training with Dani Pedrosa on Sete Gibernau's private circuit

A ride on a two-seater MotoGP bike

VIP package for the Barcelona MotoGP

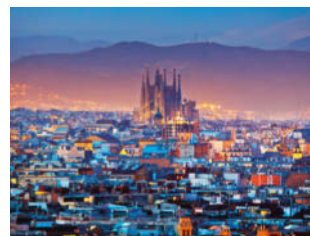
Access to the pit lane and the Red Bull Energy Station

A night at Barcelona's W Hotel, right on the beach

EXCLUSIVE: OUR TRAINING AREA

Sete Gibernau's private circuit

The circuit – 130km from Barcelona and in the Girona region – offers a variety of layouts that can be combined. Many are modelled on current MotoGP and Formula One courses – the longest measures 1.3km and has more than 20 corners. The circuit is completely flat and has sufficient run-off areas, and the anti-skid tarmac was selected specifically to offer motorbikes maximum grip.



From top: the stylish W Hotel, our accommodation in Barcelona; La Sagrada Família

Book now at destination.redbull.com

See it



FULL SPEED AHEAD

There's a month of motorsports on Red Bull TV, with coverage from the premier events in dirt biking, rally, MotoGP™ and more. Don't miss it...

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Red Bull TV is a global digital entertainment destination featuring programming that is beyond the ordinary and is available anytime, anywhere. Go online at redbull.tv, download the app, or connect via your Smart TV. To find out more, visit redbull.tv



June **LIVE**

ERZBERG RODEO RED BULL HARE SCRAMBLE

One mountain, 15 checkpoints, four hours, 500 riders – and only a handful cross the finish line. Welcome to the 25th edition of Red Bull Hare Scramble, reckoned to be the world's toughest dirt-bike race, which sees riders tackle endless uphill, formidable downhill and unforgiving rock passages at Austria's Erzberg quarry. Will the UK's Graham Jarvis be able to repeat last year's win and retain the competition's unique trophy, carved from Erzberg rock? Coverage begins on May 30, leading up to the main event on June 2.

Above: UK rider Sam Winterburn faces an uphill task at Red Bull Hare Scramble in 2017



31

May to 2 June **LIVE**
WRC PORTUGAL

The Rally de Portugal was one of the stops in the first-ever World Rally Championship, in 1973, and it's back again for 2019. See the likes of Sébastien Loeb, Ott Tänak and Sébastien Ogier – champion for the past six years – compete in a race that has been named 'Best Rally in the World' five times.

© SEBASTIAN MARKO/RED BULL CONTENT POOL, ©WORLD/RED BULL CONTENT POOL, ©GPA PICTURES/RED BULL CONTENT POOL, FUTURE/MEDIA/RED BULL CONTENT POOL

THE RACING NEVER ENDS

More head-to-head highlights to watch out for in May...

May 4-5 LIVE
MOTOGP™ ROOKIES CUP, JEREZ, SPAIN



Once again, Jerez hosts the season opener. Since staging its first Grand Prix in 1987, the course has seen some fantastic battles.

May 10-12 LIVE
WRC CHILE

Chile hosts the WRC for the first time, and the addition of this stop at Concepción makes the 2019 tour the largest since 2008.

May 14 NEW
RED BULL MOTO SPY SEASON 3 FINALE

A behind-the-scenes look at what the 2019 AMA Supercross competitors go through in the week between races.

May 18 RECAP
WESS EXTREME XL LAGARES SEASON START



Join us in Lagares, Portugal, as the 2019 World Enduro Super Series kicks off with one of its most demanding contests.

May 18-19 LIVE
DRIFT MASTERS SEASON START, AUSTRIA

It's what fans have been waiting for: Europe's definitive pro drift series begins.

May 25 RECAP
WESS TRÈFLE LOZÉRIEN AMV

A raw test of speed and skill, this enduro format has been unchanged for 100 years.



RED BULL RADIO

Hear hand-picked music and interviews with influential artists. This month's pick is...



LIVE FROM
DETROIT

20

May
ON AIR

Every year, Detroit, the birthplace of techno, hosts the Movement festival (May 25-27) – North America's premier celebration of electronic music. Red Bull Radio's lead-up starts on May 20, followed by a livestream from the Red Bull stage, with sets from the likes of Gucci Mane, Danny Brown, Disclosure, Madlib, Marie Davidson, Yaeji and Floorplan – a line-up that spans house, techno, hip hop, drum and bass, ghettech and more.

LISTEN AT
REDBULLRADIO.COM



15 April PREMIERE
NORTH OF NIGHTFALL

See mountain bikers Darren Berreclough, Carson Storch, Cam Zink and Tom Van Steenberg journey to the Arctic and discover a changing environment steeped in history, with challenging terrain unlike anything ridden before.



26 April PREMIERE
STEP OUT

Red Bull hip-hop dancer Kyoka – a B-girl from Osaka, Japan – explores the origins of various street-dance genres, then creates a unique performance piece using the new skills she has learnt.



5 May LIVE
WINGS FOR LIFE WORLD RUN

Join more than 100,000 runners and wheelchair athletes worldwide as they try to evade the Catcher Car and raise money and awareness for spinal cord injury research.

TREVOR DERNIA/RED BULL CONTENT POOL, BLAKE JORGENSEN/RED BULL CONTENT POOL, LITTLE SHAO/RED BULL CONTENT POOL, MATTHIAS HESCHL FOR LIFE WORLD RUN

Do it

April/May

4 to 5 May Spartan Race Weekend

Famously, there were only 300 Spartans at the Battle of Thermopylae in 480BC. But there will be many more competing in the UK heats of the world's biggest obstacle course series and eyeing a piece of the final £17,600 prize pot. Saturday starts strong with the Super Spartan, a 13km race with 25-plus obstacles that caters to the true-grit warrior; the next day, staggered groups of 150-plus racers take on a 5km sprint with more than 20 obstacles, including the spear throw.

St Clere, Wrotham, Kent; spartanrace.uk



24 to 27 May DRAG RACING CHAMPIONSHIPS

Find Formula One a bit bogged down by its own technological complexity? Here's the antidote. Drag racing is motorsport at its pared-down quickest. Billed as 'The Main Event', Round One of the Euro Championships sees more than 250 speed machines rocketing along Santa Pod's strip of tarmac, including the 10,000hp Top Fuel dragsters, capable of hitting 540kph.

Santa Pod Raceway, Podington;
santapod.com

9 April onwards The Twilight Zone

In a month when Oscar-winning director Jordan Peele (*Get Out*, *Us*) launches his new reboot of this iconic anthology TV series, another doorway into the 'fifth dimension' has opened up on the stage. New York playwright Anne Washburn watched all 156 episodes of the original run (five seasons from 1959-64) to weave together this spookily cool adaptation featuring classic moments, told using theatrical trickery, stunts and the infinite power of human imagination.

Ambassadors Theatre, London;
theambassadorstheatre.co.uk

11 April onwards Smoke and Mirrors

In this era of fake news, an exhibition on misdirection and sleight of hand seems especially timely. *Smoke and Mirrors: The Psychology of Magic* examines the relationship between stage illusion and science, and features props used by the likes of Houdini and Paul Daniels.

Wellcome Collection, London;
wellcomecollection.org

26 April Rave of Thrones

The epic conclusion to *Game of Thrones* is upon us, and what better way to celebrate than with a dance party in Westeros, or at least a set-designed castle with blizzards, white walkers and a replica of the Iron Throne, plus stage performances. DJ Kristian Nairn – aka Hodor in the series – will demonstrate mixing skills that are sharper than Valyrian steel.

Electric Brixton, London;
electricbrixton.uk.com

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THE RED BULLETIN WORLDWIDE



The Red Bulletin is published in seven countries. This is the cover of May's French edition, featuring MotoGP ace Johann Zarco...

For more stories beyond the ordinary, go to: redbulletin.com



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Tukkers’ luck

Red Bull Tuk It is the ultimate challenge for drivers of the iconic auto rickshaw, aka the tuk tuk. The race, which returned to Sri Lanka in February for a third year, saw teams of three tackle a muddy, rocky course from the city of Kaluaggala to the southern coastal town of Galle, completing a variety of tasks en route. You wouldn’t get this in Formula One. For more, go to redbull.com

The next
issue of
THE RED BULLETIN
is out on
May 14



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