## ESCAPE ROUTE

## COSMIC EMOTION | MICHAEL REIDY

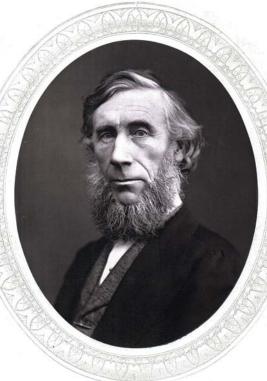
"The world is not all radiant and harmonious; it is often savage and chaotic.... The nature worshippers are blind and deaf to the waste and shrieks which meet the seekers after truth." – "Cosmic Emotion," The New York Times, August 28, 1881

"I'm not doing well," Dennis Dueñas said in a whisper, as if scared of his own voice. The words resounded in my ears like a deafening shriek. I was the one who usually wasn't doing well, who fretted over the weather or suggested we turn back. "I think we'll be fine," I answered. It was more of a question. We were descending from the summit of the 14,780-foot Weisshorn in the Pennine Alps of Switzerland, on August 19, 2011. The late-afternoon sun had burned the slopes into a viscous jelly. Every other step, we balanced on one leg and hammered our ice axes against our crampons to clear them of snow. We were moving too slowly and getting no closer to safety. I felt nauseated. It was supposed to be Dennis's job to pull me together.

We'd tried the same climb a year before, drawn to it as religious fanatics are drawn to a Sunday service. It wasn't God we were after, though. As a history professor, I'd lured my climbing partner into an ill-defined search to connect with the past. Three years earlier, Montana State had received a grant to help collect, transcribe and publish the letters of John Tyndall, the nineteenth-century Irish scientist who proved the natural greenhouse effect. When I took charge of the project, I hadn't realized that Tyndall was also a climber, and I was surprised to see how much of his writing focused on the first ascent of the Weisshorn. I'd now spent three summers scouring through the archives of the Alpine Club and the Royal Society for anything related to Tyndall and the earliest Weisshorn attempts—until I felt confined by the sterile walls of the reading room, overly restricted by the written word. As Tyndall once wrote about his own research, "there was something incongruous, if not profane,"

about sifting through crumbling manuscripts when the mountain itself still breathed life.

Somehow, beyond prudence, that feeling led us on our own quest. I had little experience with ice or snow climbing, apart from a few couloirs in the Beartooths and Absarokas that Dennis dragged me up for training. Nonetheless, for years we'd talked about venturing to higher peaks on other continents, and my historical work now gave us a specific



objective. Dennis marveled at the Victorian era's professional guides, spoken of with such reverence in Tyndall's letters: Édouard Balmat, J. J. Bennen, Ulrich Lauener, Jean-Antoine Carrel. Every one of them had died attempting the highest peaks in Europe. "They're the ones we'll really be following," Dennis said as we sifted through our gear in the living room of his alpaca ranch outside of Bozeman.

But neither of us wanted to die chasing the ghosts of long-dead scientists or their mountain masters.

THE CRISP, SYMMETRICAL RIDGES of the Weisshorn meet seamlessly like the outstretched legs of a gigantic, three-sided pyramid. Crevassed glaciers and vertical rockbands blanket the lower slopes of the standard East Ridge. A knife-edged arête slivers up to the fifty-degree snow slope that leads to the summit. During the Golden Age of the Alps, climbers spoke of the peak as a holy cathedral, a snow-clad temple where nature-lovers went to worship.

Two of the first men to reach the top were also among the most powerful intellectuals of their age. John Tyndall was already a well-known scientist. Leslie Stephen became a famous literary critic, the first editor of the Dictionary of National Biography and an early president of the Alpine Club. They both attained hero-like status among mountaineers for their passionate defense of the new sport. They wrote of their yearning to escape the monotony and drudgery of an increasingly mundane, urbanized existence. Tyndall claimed that he climbed to "restore the balance between mind and body which the purely intellectual discipline of London is calculated to destroy" (Mountaineering in 1861). Mountains, Stephen maintained, offered "strong stimulants [for his] sluggish imagination"

In the published accounts of their Weisshorn climbs, they described terrifying encounters with steep slopes, ominous weather and cascading avalanches. But as I read through their private journals and letters, I encountered a more personal story, one still in the process of unfolding, in which the labyrinth of their shifting beliefs and moral questions overpowered the external hazards of the mountain. Both men were grappling with their loss of faith at a time when religious doubt was a popular controversy. They climbed to confront the anxieties of their era.

(The Playground of Europe).

The rise of modern alpinism took place alongside the ferment of evolutionary theory. The Alpine Club of London produced the first edited volume on climbing, *Peaks, Passes and Glaciers* in 1859, the same year that Charles

Darwin published *On the Origin of Species*. Three foundational mountaineering books—Whymper's *Scrambles amongst the Alps*, Tyndall's *Hours of Exercise in the Alps* and Stephen's *Playground of Europe*—appeared in 1871, within six months of Darwin's *The Descent of Man*, and a mere two years after T. H. Huxley ("Darwin's Bulldog") coined the term "agnosticism."

Like all European intellectuals, the Golden Age mountaineers were obsessed with Darwin's dangerous idea and acutely aware of its powerful implications: If we were rising apes rather than fallen angels, how could we dictate right from wrong? Could you still be an ethical person without believing in Creation and a Christian God? Tyndall and Stephen's support of Darwinism brought them into heated conflicts with theologians, scientists and other prominent alpinists. During the early 1860s, as they formulated their views, they were also at the height of their climbing. In the process, they established an enduring link between alpinism and agnosticism that I wanted to decipher.

Others before them—Jean-Jacques Rousseau, Alexander von Humboldt and Horace-Bénédict de Saussure—had described the mountains in nonreligious terms. Yet Tyndall and Stephen went a step farther, using Alpine environments to formulate a secular creed, to create through concerted action what they would eventually defend in print. Stephen's Essays on Freethinking and Plainspeaking (1873) and Tyndall's Belfast Address (1874) present a mature tapestry of ideas initially woven in the high Alps. For them, the Weisshorn was far more than the perfect unclimbed mountain. It represented a liminal space that could blend mind and body, thought and substance: Where better to ponder your existence than by facing death on a lonely summit?

When Stephen made his first attempt on the Weisshorn in August 1859, menacing clouds and deafening slides halted him at a mere 10,000 feet. In 2010 Dennis and I met the same fate. A thick mist merged snow and sky, dulling our senses and forcing an anxious retreat. Woefully unprepared, I sat at the bottom of the glacier, peeled the price tag from my crampons and wondered, What the hell am I doing here? I could feel Dennis weighing my abilities against the magnitude of the mountain, just as the earliest guides must have sized up their British clients.

In August 1860, Tyndall and his guide J.J.

"I was thrown back upon that most important of all questions, which we generally avoid so dexterously: What is this universe in which we live...?"

—Leslie Stephen

Bennen also failed on their first try. Engulfed in storms, they spent two days drinking wine. A century and a half later, five days of rain kept Dennis and me locked in our tent in the Zermatt campground, consuming cases of beer and fending off claustrophobia by studying Tyndall's journals. Dennis read aloud every section about Bennen. "He will shun no danger, and what man can accomplish in the mountains he will perform, and depend upon it if you lose your life in his company there will be two lives lost, for he will sacrifice himself to save the man he leads." According to Tyndall, Bennen was buried in a churchyard in the village of Laax near Ernan. But Laax was over a hundred miles away. I found a "Lax" and "Ernen" much closer on the map, and suggested that we go there.

"Anything to get out of this tent," Dennis said. "And maybe Tyndall got it wrong." The next morning, we boarded a train to Lax. There, next to a little church overlooking the Deisch valley, we stumbled upon his headstone. Dennis stared at it for a long time, rehashing Tyndall's journal entry, I imagined, about the sacrifices involved in climbing. True to his word, Bennen had died in 1864, caught in an avalanche while leading clients up the Haut de Cry. Three years earlier, he'd been the first person to stand on the summit of the Weisshorn.

IN 1861 TYNDALL HIRED BENNEN specifically to climb the Weisshorn. Tyndall wanted to test his mettle against the peak, but he was also in search of something far more ethereal than a first ascent. "There is certainly morality in the oxygen of the mountains," he later admitted in *Hours of Exercise*.

On August 18, they left the small town of Randa (4,613'), with Ulrich Wegner, and zigzagged through the ban forest to a bivouac

around 9,600 feet. They woke at 2:15 a.m., and with a rope, ice axes, a full flask of wine, and a bottle of champagne, traversed the south side of the mountain through deep snow. Then they climbed up the crevassed glacier and over the bergschrund to a frozen couloir that required hours of step-cutting. "The work was heavy from the first," Tyndall boasted, "the bending, twisting, reaching and drawing up calling upon all the muscles of the frame."

At 11,500 feet, they followed a "pure knife-edge" extending horizontally for thousands of feet. "The width did not exceed that of the palm of the hand," Tyndall wrote in his journal, "and right and left were the most appalling precipices." He followed Bennen, "exactly as a boy walking along a horizontal pole, with toes turned outwards." At times, they had to scale massive verglassed pinnacles "hewn into fantastic turrets and obelisks." Tyndall forced his body into simian contortions, "swinging from one projection to another through a phase in which the head was lowest and the feet highest."

Tyndall also described the calmness that came over his body during those hours of fearful pole-walking and acrobatics-a slowpaced, focused experience. The mechanical certainty of his movement "in places where such surety was the only means of avoiding destruction" kept him going until the final pyramid came into view. Three more hours of kicking steps, and they stood on the summit. "I opened my notebook to make a few observations," Tyndall recalled in Hours of Exercise, "but soon relinquished the attempt. There was something incongruous, if not profane, in allowing the scientific faculty to interfere where silent worship seemed the 'reasonable service'." In his journal, he had scribbled, "I delivered myself up to the silent contemplation of it. Completely overpowered and subdued by its unspeakable magnificence."

Last August, Dennis and I returned to Switzerland for the 150th anniversary of Tyndall and Bennen's first ascent. Dennis wanted to follow Bennen. I hoped to tease out Tyndall's confusing mixture of intense fear and mute reverence, to give voice to the "unspeakable magnificence." But as we hiked back up through the ban forest, my own anxiety took hold. What if we were able to reach that knife-edge ridge? What happens when the weather hits?

We left the Weisshornhütte, about 600



feet above Tyndall's original bivouac, at 3 a.m. and passed our previous highpoint just as the sun ignited the upper reaches of the peak. Dennis's silhouette pressed against the first clear view of our line of ascent. With each movement, I followed the words of Tyndall's journal. I experienced the lateral shifts and oblique twists of Tyndall's body as I rounded the verglassed towers. I felt his shoulders waiver slightly as I balanced on the arête. We shouldn't have been roped, but the connection gave me an unrealistic-and according to Dennis, a foolish-sense of safety. I saw Bennen's earnest smile of relief on Dennis's face, as they both stepped off the arête and onto the start of the final pyramid.

UP TO THAT POINT, the sensations of following in Tyndall's footsteps flowed like a dream. For Stephen, the experience had felt like a slow kind of torture. With his guide Melchior Anderegg, he made a second attempt on the Weisshorn in August 1862, the same year he denounced his faith and resigned his religious

duties at Cambridge University. "I now believe in nothing, to put it shortly; but I do not the less believe in morality," he jotted in the margins of a book, echoing Tyndall's sentiments. Determined to establish a new route, Stephen and Anderegg scouted the south ridge, only to be forced back by the steepness of the rock and the hardness of the ice.

At 1 a.m. the next morning, they left a chalet about two miles below Tyndall's bivouac and began up the East Ridge under a full moon. Melchior struggled to cut steps in the unyielding slopes. "I have never seen more fearful cliffs," Stephen recalled as they stepped carefully onto the arête. It pained him to follow his rival's earlier route, but at 10:30 a.m., they were the second party to stand on the summit. "Of all the mountaintops that I know," he wrote in the *Alpine Journal*, "that of the Weisshorn is, I think, the most beautiful."

After a sluggish descent down melting snow, they scurried across the rocks girding the upper slopes, and turned to see giant cascades of stone fall across their path.

THE ROCKSLIDE REFLECTED a fragment of the sublime terror that Stephen sought in the mountains. "By such dallying with danger," he admitted in The Playground of Europe, "one learns to appreciate the real majesty of an Alpine cliff." Years later, he used a climbing epic to expound his evolving philosophy. In "A Bad Five Minutes in the Alps," he described hanging from a cliff after a hypothetical—and somewhat playful-misstep: "I was thrown back upon that most important of all questions, which we generally avoid so dexterously: What is this universe in which we live, and what is, therefore, the part we should play in it?" He duly ran through the teaching of "Protestants, Catholics, Epicureans, Positivists, Broad Churchmen, Pantheists, and a vast variety of sects," unable to find an answer. In the end, with the temptation to turn to God at its apex, he found meaning only in the possibility of cheating death and living life: the ultimate triumph of man.

Similarly, Tyndall compared his third failed attempt on the Matterhorn to "the

[Opening Page] John Tyndall (1820–1893). I [This Page] The Weisshorn (4506m) in the Swiss Alps. During the 1861 first ascent, Tyndall hesitated at a knife-edge: "Right and left the precipices were appalling; but the sense of power on such occasions is exceedingly sweet. We reached the opposite rock, and here a smile rippled over

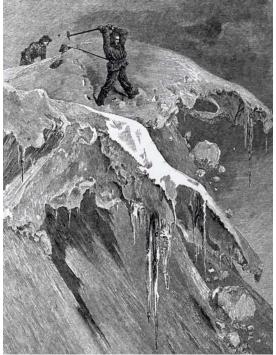
Bennen's countenance..." (Mountaineering in 1861). Swiss guides like J.J. Bennen led many of the climbs of the "Golden Age of the Alps" (1854–1865); Sherpas and other high-altitude staff enabled many of the first ascents of the "Golden Age of the Himalaya" in the 1950s and 1960s. In both cases, their employers often became more famous. Dennis Dueñas

breaking down of a religious faith" (*Hours of Exercise*). On August 1867, when he stood at last on the very pinnacle, he was struck by its "inexorable decay." A strange sadness came over him: "When I look at the heavens and the earth, at my own body, at my strength and weakness of mind, even at these ponderings, and ask myself: Is there no being or thing in the universe that knows more about these matters than I do? What is my answer?" He, too, felt that belief in God provided no real comfort. What mattered most, he realized, were the questions the mountains forced him to ask.

On the mountainsides, in the grip of beauty and fright, Stephen and Tyndall experienced something recognizably divine. Yet they described these moments not in terms of divinity, but of forces far more mysterious and personal. "Beside such might," Tyndall wrote in his journal, "man feels his physical helplessness, and obtains the conception of a power superior to his own. His emotions are stirred. His fear, his terror, his admiration." During a daring winter ascent of Mont Blanc in 1877, Stephen also felt overpowered physically and psychologically: "Does not science teach us, more and more emphatically that nothing which is natural can be alien to us who are part of nature?" he asked in The Playground of Europe, "Where does Mont Blanc end, and where do I begin?" Climbing, Stephen acknowledged, made his mind "far better adapted to receive impressions of sublimity."

For Victorians who encountered a crisis of faith, alpinism provided an ironic twist to the religious quest: they found a place to confront their mortality, to look for meaning and emerge as fervent agnostics. They did not worship the mountains. Instead, they went to the heights to contemplate the kinds of topics that others associated with religion, to discover a justifiable ethic based on the natural world, and to experience a form of secular mysticism. By describing their inner states through climbing, Tyndall and Stephen expressed a search for godliness without referring to God.

In this sense, their approach was akin to what their friend and fellow agnostic William Clifford called "cosmic emotion...which is felt in regard to the universe or sum of things... continually educating us and teaching us to act rightly." You could arrive at that emotion only by viscerally experiencing the radiance



[Photo] Edmund Whymper (1840–1911) on the Matterhorn (4478m), during the 1865 first ascent that ended in the deaths of four men. After earlier attempts, Tyndall had declared the peak "unconquerable." He later climbed it himself in 1868. Hulton Archive/Getty Images

and chaos of nature. The individual pursuit of this feeling separated truth-seekers from mere nature-worshippers.

MEANWHILE, Dennis and I grappled with our own doubts: What does it mean to search out history? How do you make a meaningful connection to mountaineers you know only through books? As Tyndall and Stephen climbed to what Victorians called a "purer ether" and a "higher medium," they struggled to formulate what it meant to live a moral life. As Dennis and I breathed the same air, we expected to feel what they felt, to wrestle with similar questions.

After more than two hours on the arête, we hit the soft snow of the final pyramid. Three more hours of kicking steps, and we stood where Tyndall and Bennen had 150 years earlier. Dennis kept calling me "Tyndall" and gushing eloquently about Bennen's forgotten place in history. But I remember little else about the summit. Tyndall and Bennen had vanished. I just wanted to get down safely and drink a beer at the *Hütte*. That, too, seemed despairingly distant.

When Dennis whispered that he wasn't doing well, I panicked. Despite the majesty of the Alpine cirque below our feet, all I could think about were grizzly newspaper reports describing the deaths of a historian and an alpaca farmer on the Weisshorn. Nonetheless, I kept shuffling forward, and Dennis followed.

We moved methodically and silently, trapped in our own thoughts.

Only after I was safely back in my office at Montana State, re-reading my journals from the past two summers, did I realize how similar my entries were to those of the long-dead Victorians. Like Tyndall, I'd fumbled through sections, "which without the spur of necessity, we should have deemed impassable." And in Stephen's words, I'd finally found my "sluggish imagination" stirred. Something about that juxtaposition of sheer terror and beauty had brought Tyndall and Stephen to life.

Published writing and personal musings acquire meaning only within the context of lived experiences, at the confluence of overlapping emotions. Historians relish in the archive; they thrive on old books and forgotten correspondence. Often, they know little of the contemplative loneliness of a snow-capped summit, the anxiety of scanning the horizon for

weather, or the cool calm that can overpower real peril. The Weisshorn provided me with an alternative archive—an emotional link to the past that was simultaneously individual and shared, visceral and cosmic. It helped me restore the balance between mind and body, which the purely intellectual discipline of history is calculated to destroy.

I now practice history through these remembered heights. Since many of Tyndall's letters include references to the peaks and glaciers of the Pennine chain, I've been able to put known places to the illegible spaces in his writings. And I've begun to realize how much those early agnostics influenced the way we view mountaineering today. High Alpine environments are not so much a place of escape as they are a place to explore one's inner self; not so much a means to get away, as a way to get inside. They are a testing ground: physically, intellectually and spiritually. We seek answers, but we also revel in the questions. This impulse explains why we place ourselves in danger, and why we have such difficulty explaining our actions to non-climbers. It helps explain why climbing is so deeply personal, a moral quest as much as an athletic one. And it explains why climbing creates such fellowship—from the shared experiences of finding meaning in the mountains. We are often portrayed as mere nature worshipers, but we all aspire to be seekers after truth. ■