BREAKING THROUGH

A radical therapy may heal the deepest layers of the brain—and transform the way we treat the often untreatable victims of PTSD

BY **MATTHEW GREEN**

PHOTOGRAPHS BY **CRISTINA DE MIDDEL** FOR NEWSWEEK

AT THE TURN of the millennium, a young woman moved to a cabin on the Mull of Kintyre, a headland in southwest Scotland renowned for the bleak beauty of its cliffs and the treacherous swirl of the currents below. There she took in two horses, and for a time the silent companionship of those geldings offered more in the way of healing than the countless prescriptions she'd been given by psychiatrists, or the well-meaning attempts by therapists to excavate the most painful parts of her past. Then, in early 2013, she did something she had promised herself she would never do again: She bought a bottle of vodka.

The woman, who asked to be identified only as Karen, cannot recall the precise trigger that made her reach for a drink after 12 years of sobriety. But she does remember stumbling into the hospital in Lochgilphead, the nearest town. Intoxicated and near-delirious, she feared the suicidal impulses that had racked her since she was a teenager might prove too strong to resist.

Dr. Gordon Barclay was making his rounds that day. A consultant in general adult psychiatry with a passion for Goethe, he was a more attentive listener than the street drinkers who had served as Karen's confidantes during past relapses. From her hospital bed, she told him about the sexual abuse in her early years, and how she'd learned to dull its searing legacy with alcohol. But the terror she felt while lying awake in bed as a young child, afraid to close her eyes, still lived inside her. It was a story she had told too many psychiatrists and psychologists, but the endless retelling had never changed the way she felt. It was as if she was always waiting for the abuse to begin again. In that way, she was still 5 years old. "Everything was tinged with fear," says Karen, now in her mid-40s. "I was always driven by the past."

Barclay soon realized Karen had post-traumatic stress disorder (PTSD), a condition caused by exposure to a horrific or life-threatening event that can lead to a wide spectrum of devastating symptoms, from bouts of overpowering anxiety to mind-saturating despair, emotional numbness, night terrors and uncontrollable rage. Sufferers can experience flashbacks to a time when they thought they were about to die: high-definition replays in their minds, complete with smell, texture and sound. Symptoms like these can persist for years, even decades, and leave people feeling so damaged that they can't help but push away even those they love the most.

As Karen had discovered, PTSD can be maddeningly difficult to treat. She still remembers the panic in the eyes of one social worker when his attempts to get her to open up brought on the full force of her terror. "It didn't matter where I went—nowhere seemed to be able to offer any help," she says. "The only way I knew how to deal with it was alcohol and also prescription drugs."

Though Karen drew on her experiences to forge a career in addiction support, she lived her life on a precipice. The abuse she had suffered did not just live on in her mind: It seemed to inhabit the very muscles, fibers and tissue of her body. This visceral volcano was beyond her conscious control: It manifested in panic attacks that felt like a giant screw turning in her gut, bouts of nausea or the times when a lover's touch would cause her to freeze like a startled deer. No matter how hard she tried to convince herself she was better, her body refused to believe she was safe. "I felt cowardly. I felt shut down," she says. "The fear in the body attached itself to everything in life."

Contrary to all she'd been told, the answer wasn't more talk. It was less. Karen was trapped in her head, and with Barclay's help, she saw that the way to fix her mind was to listen to her body. "I would hate to knock talking therapy, but it can encase you more in the trauma—you almost become stuck in it," she says. "They're really well-meaning people, but they screwed me up even worse."

Karen reached this conclusion—one at stark odds with much of the therapy conventionally used for trauma—after Barclay introduced her to a new and relatively obscure method for treating PTSD. The Comprehensive Resource Model (CRM) was developed over the past decade by Lisa Schwarz, a licensed psychologist in Pennsylvania who has practiced for 30 years. Fusing elements of psychology, spirituality, neurobiology and shamanic "power animals," Schwarz has taught the technique to more than 1,500 therapists around the world, including more than 350 people in

Scotland, where CRM is used at rape crisis centers and a private in-patient trauma clinic. The therapy has also been embraced by several psychiatrists with Britain's state-run National Health Service, including Dr. Alastair Hull, one of the nation's top PTSD specialists, who leads NHS psychotherapy services for almost 400,000 people and runs a clinic devoted to treating traumatic stress.

Ever since Sigmund Freud pioneered the "talking cure" in the late 19th century, psychologists have been trumpeting new ways to make people feel happier—or at least less miserable—and usually delivered more hype than hope. Indeed, a widely cited 2001 study found that it is the warmth and empathy of the therapists—and not the type of therapy they use—that may be the most important factor in treatment. And there's another reason to be cautious about CRM: It has not yet passed any formal clinical trials. Nevertheless, CRM's proponents make bold claims. The model can not only completely remove symptoms of PTSD, they say, but also help patients live their lives with greater serenity than they would have imagined possible before they were poleaxed by their trauma.

In standard therapy, practitioners will encourage survivors to come to terms with an awful event by talking about it in great detail, and perhaps even record their account so they can later listen to it over and over to extinguish their fear. Schwarz's work could not be more different. In a CRM session, there's no need to talk about what happened. Rather than delving into the stories her clients tell about the past, Schwarz encourages them to focus on the physical sensations arising in their bodies as they silently recall their worst memories: chest-crushing sadness, a hot flash of anger, stomach cramps, palpitations or feeling like one's heart is frozen in ice. Only by facing such feelings fully—if only for a moment—can the survivors finally let go of their buried anger, terror or shame.

The problem, as Karen discovered, is that even with the support of the most sympathetic therapist, such feelings are often too much to bear. That's why Schwarz equips her clients with tools to give them the strength to confront the raw emotions they've kept locked deep inside for so long. Inspired by Native American healing arts, mystical traditions and the practices of tribal shamans, some of these "resources" require something of a metaphysical leap. These include various breathing and visualization exercises, and also work with eye positions—based on the theory that different emotions correlate to minute variations in the direction of gaze. At key points in the process, Schwarz aims to help clients tap into their intuition by posing what she calls her "magical question" to find out what aspect of their trauma history needs to be tackled next: "Don't think. Ask your body, not your brain, and take the first answer that comes."

The unusual aspects of CRM do not stop there. Patients can learn to safely dissolve long-buried distress by making a sound—usually a prolonged, high-pitched note—in a process known as "toning." Participants can also call on imaginary beings in the form of "power animals"—therapy-speak calls them "internal attachment figures"—to accompany them through the darkest tunnels of their past. These often take the form of big cats, wolves, bears or birds. None of these entities are, of course, real in any ordinary sense, but CRM practitioners believe these and other resources can help patients connect with what they call the "core self"—an inner essence immune to life's cuts and bruises.

While Schwarz is fired by the conviction that she can help countless people for whom existing methods have failed, there is a risk that some specialists may assume talk of "power animals" or "toning" sounds is fantasy-prone pseudoscientific nonsense. Professor Neil Greenberg, an academic psychiatrist at King's College London and an authority on psychological injury in the U.K. armed forces, backs innovation but warns that clinicians should not place undue faith in a new PTSD treatment before it is validated by rigorous research. "I'm not saying we don't need to treat [PTSD], but the impetus is to do it right, because doing it wrong can harm people and also dissuades people from going to get other treatments."

The battle here is about more than the future of PTSD therapy. Throughout history, some of the biggest breakthroughs in science have been made by individuals whose hunches prompted them to embrace convention-shattering ideas—often before the data backed them up. Perhaps the biggest hurdle for mavericks in any discipline is that intellectual orthodoxies tend to perpetuate themselves. It's usually much easier to obtain funding to tinker at the edges of what is already known, rather than demolish cherished assumptions. Few funding bodies make grants based on Albert Einstein's maxim: "If at first the idea is not absurd, then there is no hope for it."

The dominant school in psychology today is cognitive therapy, a form of talk therapy aimed at helping patients feel better by encouraging them to think differently and change their behavior. Often used in tandem with medication to suppress symptoms of depression or anxiety, cognitive therapies are backed by a wealth of scientific research. Although nobody claims they work for everyone, they have become so deeply embedded in a global, multibillion-dollar complex of pharmaceutical companies, insurance firms and health departments that critics are only half-joking when they describe them as a quasi-religion. With such entrenched interests at stake, dissidents armed with an alternative paradigm are sure to face resistance, perhaps even mockery—especially from empirically minded psychiatrists allergic to anything that sounds remotely like woo-woo.

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Nevertheless, there are plenty of therapists ready to argue that you don't have to be a crank to question the limits of talk. The CRM school is one tributary in a much wider movement of PTSD specialists who believe body-oriented

approaches can help people who might never otherwise get to the root of their problems. If they are right, the implications go far beyond treating the psychological scars of rape, accidents or warfare. There is mounting evidence that childhood trauma caused by abuse, neglect or abandonment is behind much of the depression, anxiety and addiction suffered by adults. Western industrial civilization is founded on faith in the problem-solving power of the intellect. But if modern societies want to heal from an epidemic of mental illness, Schwarz and her allies believe that yet more thinking will not suffice: The true answers will be found beyond the veil of the everyday, rational mind.

HER FIRE-BREATHING DRAGON

AT 55, with shoulder-length curls and a ready laugh, Lisa Schwarz radiates a certitude that can't be learned from textbooks. If she hadn't ended up as a psychologist, it would be easy to envisage her interrogating suspects at a downtown police station in the small hours, using a blend of humor and streetwise charm to extract confessions. Her forthright manner—by turns blunt and effusive—can provoke consternation among some colleagues. Fans, however, suspect that her confidence stems from the fact that she has "done her work"—therapy parlance for the exacting process of working through your own traumatic experiences before you can help others.

As a teenager, Schwarz had hoped to spend her career curing animals, but when she failed to qualify to study as a veterinarian, she opted for psychology and later began practicing in her hometown of Pittsburgh. Though she was able to help trauma survivors learn to cope better with their symptoms, she observed that some never fully recovered. Schwarz's doubts about talking therapy crystallized when she suffered a protracted breakdown that forced her to question everything she had been taught. "To be able to do this work," she says, "it helps to have gone through something yourself that tore you down to skeletal proportions, and come back out of that, like a phoenix that rises out of the ashes."

As Schwarz began to recover, a scene returned to her from childhood: her mother telling her and her brother to clear the dandelions that sprouted on their lawn each spring. As they plucked the golden-yellow heads, the siblings soon discovered that the flower is a cunning adversary that can be defeated only by painstakingly digging up its taproot. Schwarz saw the plant's tenacity as a metaphor for the self-destructive patterns that trauma seeds in the deepest crevices of the psyche.

To dig up this "dandelion root," Schwarz began to work with therapists at the intersection of medicine and mysticism—from "urban shamans" practicing in American suburbs to a spiritual healer from Afghanistan. Gradually, she acquired what she considered to be the vital missing piece in talk therapy: tools powerful enough to enable a survivor to safely confront feelings they had been running from their whole lives. It was these tools Barclay would later use to treat Karen.

At first, his methods struck Karen as a little odd. He started by using conventional talk therapy to win her trust. As they progressed, he began to draw on Schwarz's methods for the riskiest but most important part of any trauma work—confronting the ugliest pain from the past, feeling it fully and then letting it go.

His first step was to help Karen feel safe. Trauma survivors often suffer from something called "dissociation"—meaning they become numbed to their emotions. Psychologists believe this is a form of self-defense gone awry. According to one theory, when the brain senses it is about to be killed, it "unplugs" from the rest of the body to avoid the pain of a horrible death. (Such people might describe a brief out-of-body experience—as if they were looking down on themselves from above.) The problem here is that the brain's defenses are much easier to switch on than they are to switch off. Long after the threat has passed, trauma survivors may still feel profoundly cut off from their feelings, and that can ruin relationships and fuel risk-taking behavior or addictions.

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In PTSD treatment, this self-defense mechanism can make treatment difficult and even dangerous: The only way to overcome a trauma is to confront unresolved emotions, but clumsy attempts to do so can trigger further dissociation. Like a bomb disposal technician trying to disarm a booby-trapped device, the therapist must find a way to defuse the patient's natural defenses without them blowing up. And one wrong move can cause lasting harm.

Barclay began by asking Karen to mentally

scan her body for even the smallest points where she could still feel a sense of being centered and present. He then asked her to imagine joining these dots with bars of energy to create a "grid of light" crisscrossing her body—a CRM technique to stop her dissociating. Patients say that this imaginary structure—the grid—serves as a kind of "emotional scaffolding" that keeps them stable as painful memories surface.

In later sessions, Barclay invited Karen to choose a "power animal" to help her confront more of the abuse she'd suffered in childhood. Rather than conjure an imaginary animal, as clients often do, Karen drafted in her adopted horses, imagining that they were close to her the whole time, watching with loving, protective eyes.

Barclay went on to teach her another grounding exercise, known as "CRM Earth breathing," in which Karen imagined she was filtering energy up from the Earth's core, drawing it to the base of her spine through the sole of one foot then expelling it out the other. In another breathing exercise, she released anger by seeing herself "fire breathing" smoke and flames like a dragon. And she learned to bathe herself in kindness by visualizing the act of inhaling and exhaling through her heart.

Some psychiatrists will lump such techniques into the same waste bin as tarot cards and crystal healing, and advise patients to instead try one of the standard therapies widely endorsed by government health regulators. Many practitioners use trauma-focused cognitive behavioral therapy, a form of talk therapy adapted to treat PTSD. Though CBT therapists may also use breathing and relaxation tools, the core of the process rests on leading trauma survivors through an "exposure" exercise to revisit their most distressing memories so they gradually become easier to bear. At the same time, the therapists will talk through what happened with the clients to help them arrive at a less threatening interpretation so the past loses its grip over the present. Studies show the approach can help people who have suffered a one-off event such as a car crash or violent assault. However, there is far less evidence to suggest it helps people with the most complex presentations: those who, like Karen, have suffered multiple traumas over many years.

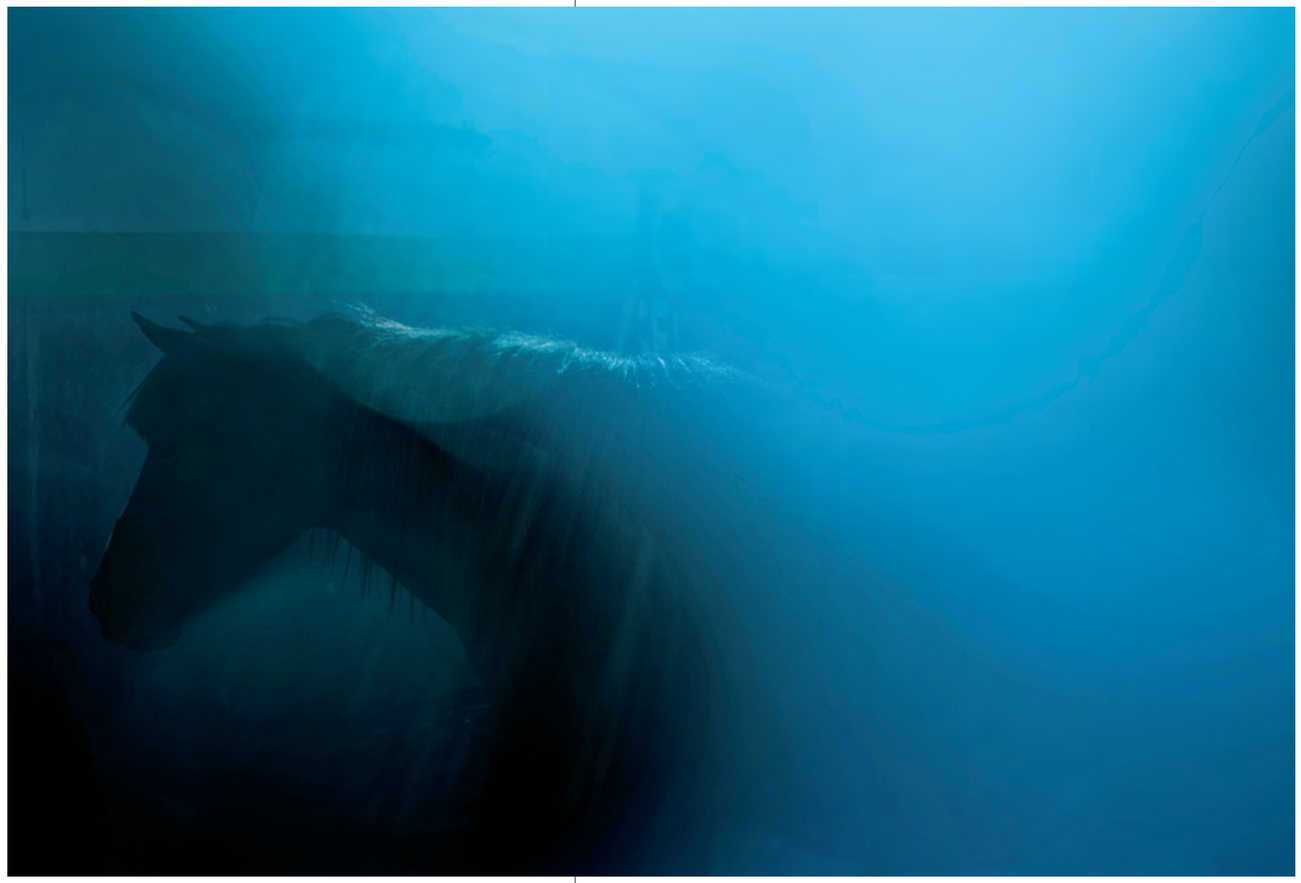
"I'm worried that I'm going to hurt someone and this is not going to end well."

Here is the problem with cognitive therapies, according to the CRM innovators: Talking engages primarily with the prefrontal cortex—the walnut-contoured upper layer of the brain that processes language and abstract thought. This "top-down" approach might help somebody to cope better with their symptoms, but to truly resolve decades-old fear, anger or shame, the therapist needs to find a way to influence the primitive, instinct-driven parts of the brain near the top of the spine. Words alone are unlikely to have much impact on these deeper, preverbal regions. The best way to rewire this "emotional brain" is to help clients work from the "bottom up" by putting their physical sensations at the center of the process. For clients like Karen, whose lives are organized around escaping these feelings, the first task is to regain a sense of self-mastery over their own body. "In order to confront the deepest layers of anxiety, fear and survival terror, you have to go beyond just telling stories about the past," says Domna Ventouratou, a Greek psychotherapist and founder of the Institute for Trauma Treatment in Athens, who trained under Schwarz. "You have to find ways to safely unearth old emotions stored deep in the body."

In CRM, the emphasis is on making sure these emotions can be dissolved safely. Practitioners claim the breathing exercises, visualizations and other tools can help cleanse toxic emotions from the "emotional brain" while activating neural pathways associated with being cared for and nurtured. Girded with their "power animals," "grids" and other resources, survivors can finally release feelings that would have otherwise been too overwhelming to face.

"To resolve trauma you have to go back and re-experience it, rather than just understand it," says Barclay. "CRM provides the tools to do that in a way that conventional talking therapies, and indeed many trauma-focused therapies, often don't. That's why it leads to breakthroughs."

For all the enthusiasm, however, the obstacles to CRM and other body-focused therapies becoming more widely available are formidable. Government regulators tend to approve only treatments that have been subjected to large and expensive clinical trials—whether they be new therapies or drugs. Although several insurers will cover CRM sessions in the U.K., this is not yet the case in the much larger U.S. health market. Schwarz and her collaborators in Scotland plan to launch a joint U.S.-U.K. treatment outcome study in the fall, but accumulating persuasive data can take years and requires much hard-to-obtain funding.



Undaunted, Schwarz is determined to build her movement from the grassroots and spends much of the year on the road conducting workshops globally, from Ireland and Greece to the U.S. and Australia. She and her comrades are also pursuing another avenue to convince the medical establishment they're not just New Age kooks: They're banking that neuroscience will show there's more to CRM than magic.

THE DEEPEST WOUND

ON A BITTERLY cold day in February of 2016, Schwarz landed at the airport in London, Ontario, a city of 366,000 people nestled in the agricultural plains of southern Canada. As her taxi sped through slushy streets, Schwarz felt the anticipation that only comes when years of work suddenly seem a step closer to fruition. Professor Ruth Lanius, one of the world's leading neuroscientists investigating PTSD, had invited Schwarz and a close collaborator, Scottish consultant psychiatrist Dr. Frank Corrigan, to the Lawson Health Research Institute, located in a hospital on the edge of the city center. Lanius, intrigued by Schwarz's work, had offered a dream opportunity for anyone pioneering a new form of therapy: a day's run with a powerful functional MRI machine. These types of scanners measure fluctuations in blood flow and oxygenation to show what happens inside the skull when people perform certain tasks or revisit memories—making them ideal for investigating a new therapy.

Lanius has used such images to show that traumatic experiences can cause lasting physical changes in the brain. In particular, she has shown how trauma appears to disrupt the neural pathways that underpin our ability to relate to others, which may help explain why so many survivors report feeling cut off from their loved ones. One former soldier told *Newsweek* that when he had returned from Northern Ireland in the early 1970s, his wife and children seemed to him to be as lifeless as mannequins in a shop

window, vividly articulating the feeling of being trapped behind a metaphorical glass wall experienced by so many people with PTSD.

Nobody can say for sure precisely how psychological trauma might damage structures in the brain. One hypothesis is that the brain releases such a deluge of stress chemicals when it perceives it is facing imminent death that certain brain cells die, causing a "blown-fuse" effect that leads to chronic malfunction. Alternatively, researchers in the U.S. are increasingly concerned about the apparent link between PTSD-like symptoms among veterans and hard-to-detect brain damage caused by blasts in Afghanistan and Iraq. "One of the major things that the neuroscience of trauma has done is make an invisible injury visible," Lanius says. "So often, traumatized clients come to see us, and they have literally been told time after time, 'There's nothing wrong with you. It's all in your head. Get over it.' Getting validation that, Yes—there's something different in my brain, has been a huge advance." Whatever the precise cause, Lanius says her patients are often relieved to discover that they may be suffering from a very real—albeit microscopic—physical injury buried somewhere in the brain's 86 billion neurons.

So if the brain has been damaged, how best to repair it? In Canada, Schwarz, Corrigan and Elisa Elkin Cleary, an American psychotherapist, planned to put CRM to a scientific test. They would each undergo a brain scan before and after being led them through an hourlong session to work on an upsetting episode from their lives. The resulting images would show whether the therapy had influenced the deeper areas of the brain governing strong emotions.

Cleary donned a surgical gown and shoe-coverings, entered the scanner chamber, climbed onto a slab extended from the round mouth of the massive machine, then put on a headset containing 32 magnetic coils held in place with a box-shaped mask. When the slab retracted, she was lying face-up in the cylinder, illuminated by a faint white glow. Schwarz watched through a window from an adjacent control room and spoke through an intercom linked to Cleary's headset.

"Hi Elisa, just inviting you to activate the deepest wound, the deepest dandelion root that is still feeding on 'not enough,'" Schwarz said, in the commanding tone she adopts with clients. "Invite your body to remember it fully—a hidden remnant or a buried piece. Just think about all the times you tried really hard and it just wasn't enough—whether it was your mom, at school, with other girls, at college. Just inviting your body, not your brain, to remember. Just inviting the deepest wounds to fully be revealed."

Cleary remained as still as possible as her old sadness welled up and the machine—emitting a high-pitched thrumming sound—took 160 images during the eight-minute scan. These snapshots would later be processed into a three-dimensional map of activity in her brain. Then the pair retreated to an office for a CRM session where Schwarz worked on Cleary's sense of "never being enough" before they conducted another scan.

The next day, Lanius invited Schwarz and Corrigan into a basement classroom with peppermint-green walls to address about a dozen of her psychiatry students. For the two friends, taking this modest public platform alongside such an esteemed authority on PTSD seemed like a milestone. The students listened carefully as Schwarz and Corrigan used a whiteboard to illustrate their theories of how "power animal," energy "grid" and "core self" exercises might stimulate brain areas linked to feelings of security and trust.

Though they have worked together for four years, the two friends are an incongruous duo. A soft-spoken academic fluent in the jargon of brain anatomy, Corrigan is a fellow of the International Society for the Study of Trauma and Dissociation, writes peer-reviewed papers and is co-author of a textbook on the neurobiology of trauma. Having made it his mission to explain CRM in neuroscientific terms, Corrigan frequently dives into such detail that Schwarz, a relative newcomer to the topic, has to marshal all her focus to keep up.

While the less-orthodox aspects of Schwarz's model might have prompted some neuroscientists to ban her from their office, Lanius was uniquely placed to objectively consider her approach. Unlike many of her colleagues who are focused solely on research, Lanius treats PTSD patients—including Canadian veterans of Afghanistan. Outside the rarefied world of neuroimaging studies, in the grittier confines of a trauma clinic, she knew that taciturn former combatants often began to open up when she ventured outside the strictly scientific realm by saying: "Tell me about your soul."

"Really, the [CRM] model is a combination of neuroscience and spirituality," Schwarz told the class. "We're trying to really clarify the neurobiology so people can see the model for what it really is, and not what people presume it to be because of some of the aspects that seem to be a little... What's the word, Frank?"

"Strange?" ventured Corrigan, wearing a characteristic deadpan expression.

"Strange," said Schwarz, with a nod and a wry smile.

"A 'power animal' gives you options."

A SLEEK, VELVET-COATED JAGUAR

NOVEL—AND very strange—forms of body-oriented psychotherapy have been around for at least a century, drawing inspiration from Friedrich Nietzsche's dictum that "there is more wisdom in your body than in your deepest philosophy." Though once confined to the fringes, they began to gain greater traction in the mid-1990s, when Dr. Bessel van der Kolk, a combative professor of psychiatry at the Boston University School of Medicine, wrote an influential paper on trauma called "The Body Keeps the Score." In September 2014, Van der Kolk galvanized the movement by publishing a best-seller of the same title that built on his clinical experience and two decades of advances in neuroscience.

Van der Kolk is a notable advocate of Eye Movement Desensitization and Reprocessing (EMDR), a PTSD treatment in which therapists stimulate bilateral movement of clients' eyes by wagging a finger in front of their face or shining flashing lights. Despite initially being dismissed in some quarters as quackery, EMDR is now backed by enough clinical evidence to have been adopted as a standard treatment in Britain, even though nobody knows quite how it works. Other body-based schools supported by fewer studies include "sensorimotor psychotherapy" and "equine therapy," in which participants confront their patterns in human relationships while learning to bond with a horse. With so much guilt and shame often attached to trauma—Karen described feeling like a "piece

of dirt"—practitioners report that the absence of judgment from the animal can help people learn to forgive others and themselves.

For all this innovation, however, history suggests there has been no smooth arc from ignorance to enlightenment in our understanding of the interplay of mind and body at work in trauma. In the American Civil War, medics diagnosed spent men with an ailment they termed "soldier's heart," blaming their psychological collapse on cardiac problems. Victorian doctors diagnosed survivors of train crashes with "railway spine," assuming their malaise was caused by damage to their spinal columns. While the creation of the PTSD diagnosis by the American Psychiatric Association in 1980 spurred a proliferation of research, treatment outcomes are still often poor. Given that history, professor Sir Simon Wessely, president of the Royal College of Psychiatrists, wonders whether the buzz around the neuroscience of trauma may be premature. "We believe we have more of a neuroscientific understanding of PTSD, but I'm slightly dubious about that, and I think an awful lot of it is pretty crude," Wessely tells *Newsweek*. "I just wonder if that's our modern way of storytelling."

Despite such reservations, it is hard to dismiss the testimony of patients who say they owe their sanity to CRM. Among them is Steve (not his real name), a former special forces soldier whose PTSD symptoms had grown so severe that he had come close to taking his own life. Steve, who lives in Scotland, sought help from Hull, the NHS trauma specialist, who has since co-authored an academic textbook on CRM with Corrigan and Schwarz.

Hull has practiced psychiatry for 26 years and earned his medical doctorate studying survivors of Piper Alpha, a North Sea oil platform that exploded in 1988, killing 167 people in the world's deadliest offshore oil disaster. Having taught evidence-based therapies, including EMDR and trauma-focused CBT, two of the most widely used trauma treatments in Britain, Hull adopted Schwarz's approach when he found it worked for patients who did not respond to other methods. He later began using CRM at a mental health clinic for military veterans he runs in Dundee, Scotland.

Patients are relieved to discover they may be suffering from a very real physical injury buried somewhere in the brain's 86 billion neurons.

As Steve's sessions with Hull progressed, the former soldier discovered his "power animal"—a sleek, velvet-coated jaguar. Hull asked him to close his eyes and then led him back to one of his most disturbing early memories: being beaten by his alcoholic father. Hull told Steve the jaguar could help the little boy in him feel that he would not have to face his ordeal alone.

Recalling that moment, Steve tells *Newsweek*, "I'm standing there as a small child, standing underneath this cat, with huge paws on either side of me, almost with my head against its chest. I'm feeling the vibration of this thing breathing. It was incredibly powerful."

Hull worked with another former soldier who learned to summon an eagle, which circles overhead, scouting for danger, and a grizzly bear, who taught him he can be tender as well as tough, but there was something extra special about Steve's bond with his big cat. One evening, when Steve encountered a group of aggressive young men at a service station, he says the jaguar steered him out of trouble. Steve recalls the jaguar's advice: "Listen, it will all be fine, walk away. Even if someone does provoke you, what's the worst thing that can happen? You're a couple of minutes late for your coffee."

Steve adds: "A 'power animal' gives you options. With my history, I'm worried that I'm going to hurt someone and this is not going to end well. I don't care—if I'm provoked in that way, I'm going to react, and I'm not going to stop until they stay down."

Like Steve, Karen needs no convincing. Armed with the sense of security provided by the Earth breathing, grid and her two power horses, she found the courage to confront her past without feeling like she was about to die. Under Barclay's patient guidance, she was finally able to say goodbye to four decades of wordless pain.

"For me, something shifted," Karen says. "There was a degree of re-experiencing which I'd never done before. He created a safe space to allow me to feel."

While a menagerie of animal totems is now poised to pounce, swim or wing their way to the aid of her growing network of CRM practitioners, Schwarz's most powerful ally may be her patience. Several months after she traveled to Canada to conduct the neuroimaging session with Lanius, the results came back. The scans suggested CRM had led to what Lanius described as "significant changes" in the brain areas that help us govern overwhelming emotions and are especially relevant to trauma.

Schwarz received another boost in September, when Lisa Merrifield, a clinical psychologist in Omaha, Nebraska, captured additional physiological evidence of CRM's effects. Merrifield used an electroencephalogram to assess eight participants before and 24 hours after intensive CRM sessions. The EEG, which measures electrical activity in the brain, quantified conspicuous changes to the brainwave patterns of all eight participants. Merrifield said the results of her small pilot study, conducted at Schwarz's retreat near Beulah, Colorado, merited further investigation. In January, Schwarz and Corrigan returned to London, Ontario, to run a four-day seminar to teach Lanius and her staff the basics of CRM.

In science, such glimmers could be seen—at best—as intriguing clues, and certainly not conclusive evidence. For Schwarz, though, they seemed like starbursts. It no longer seemed inconceivable that a day would come when the data would confirm what her heart and gut have been telling her for years: Each of us has a trove of hidden resources that can help us transcend even the cruelest of abuse, horror and betrayal, if only we dare look within. N

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