

Stealing Fire: How Silicon Valley, the Navy SEALs, and Maverick Scientists Are Revolutionizing the Way We Live and Work

Steven Kotler & Jamie Wheal 1825

Introduction

Some revolutions begin with a gunshot, others with a party. This one kicked off on a Friday night in downtown Athens, in 415 BCE. Alcibiades, a prominent Greek general and politician, had invited a small circle of friends to his villa for what was to become one of the more infamous bacchanals in history. Hooded in the stolen robes of a high priest, Alcibiades swept down his marble staircase, recited a forbidden incantation, and produced an ornate decanter. Carefully, he poured a single shot of a dark liquid into each guest's glass. A few more words, an exuberant cheer, and everyone drained their cups.

Accidental Prometheans

____“We founded the Flow Genome Project in an attempt to solve this problem. Our goal was to take a multidisciplinary approach to mapping the neurobiology of flow, and then open-source the results. But to do this, we had to establish a common language around these states. So Steven wrote *The Rise of Superman*, a book about the neuroscience of peak performance and action sports.

On too many occasions to count, people would pull us aside to tell us about their clandestine experiments with “ecstatic technologies.” We met military officers going on timemonthlong meditation retreats, Wall Street traders zapping their brains with electrodes, trial lawyers stacking off-prescription pharmaceuticals, famous tech founders visiting transformational festivals, and teams of engineers microdosing with psychedelics. In other words, everywhere we went, someone was trying to steal the *kykeon*.

Part One: The Case for Ecstasy

Chapter One: What is This Fire?

The Switch

____The Greeks had a word for this merger that Davis quite liked - *ecstasis* - the act of “stepping beyond oneself.” Davis had his own word as well. He called it “the switch,” the moment they stopped being separate men with lives and wives and things that matter. The moment they became, well, there's no easy way to explain it - but something happened out there.

Plato described ecstasy as an altered state where our normal waking consciousness vanishes completely, replaced by an intense euphoria and a powerful connection to a greater intelligence.

The High Cost of Ninja Assassins

It costs \$25,000 to turn an average Joe into a combat-ready U.S. Marine. SEALs, meanwhile, cost a lot more. Estimates for eight weeks of Navy basic training, six months of underwater demolition training, six months of advanced skills training, and eighteen months of predeployment platoon training - that is, what it takes to get a SEAL ready for combat - total out to roughly \$500,000 per head. Which is to say, the Navy SEALs are among the most expensive collection of warfighters ever assembled.

And that's just the cost of training garden-variety ninja assassins. Making it to the elite DEVGRU unit requires first rotating through several other SEAL teams (there are nine in total). As it costs about \$1 million a year to keep a frogman in the field, and these rotations take a couple of years to complete, add roughly another \$2.5 million to the tally. Finally, there are additional months of hostage rescue training, which is DEVGRU's specialty, at somewhere north of \$250,000 per. All in, those couple dozen men under Rich David's command, the SEAL unit charged with capturing, not killing, Al-Wazu, were an exceptionally well-oiled \$85 million machine.

The second [rule to moving as fast as possible] is trickier:
the person who knows what to do next is the leader.

And like the SEALs flipping the switch, the Googler's “communal vocational ecstasy” relies on changes in brain function. “Attending festivals like Burning Man,” explains Oxford professor of neuropsychology Molly Crockett, “practicing meditation, being in flow, or taking psychedelic drugs rely on shared neural substrates. What

many of these routes have in common is activation of the serotonin system.”

The Mind Gym

When that meeting was over, they walked us through their newest facility, the Mind Gym, which was their best guess at how to train for ecstasis and not just screen for it. Sure, it cost millions to build, but if it could help them flip that switch reliably - if it could help more good men learn this invisible skill - it would be worth much more than that.

By using the tanks to eliminate all distraction, entrain specific brainwaves, and regulate heart rate frequency, the SEALs are able to cut the time it takes to learn a foreign language from six months to six weeks. For a specialized unit deployed across five continents, shutting off the self to accelerate learning has become a strategic imperative.

Right after our presentation, we pedaled a couple of the ubiquitous and colorful Google bikes to the other side of campus to attend the opening of their new multimillion-dollar mindfulness center.

“It’s going well,” explained Adam Leonard, one of the leaders of “G Pause” (their name for the mindfulness training program).

Chapter 2: Why It Matters

The Ambassador of Ecstasis

The *Atlantic* ran a long profile, anointing [Jason Silva] “the Timothy Leary of the Viral Video Age.”

Selflessness

When you think about the billion-dollar industries that underpin the Altered States Economy, isn’t this what they’re built for? To shut off the self. To give us a few moments of relief from the voice in our heads.

So, when we do experience a non-ordinary state that gives us access to something more, we feel it first as something *less* - and that something missing is us.

Timelessness

A quick search on Google yields over 11.5 billion hits for the word “*time*.” In comparison, more obvious topics of interest like sex and money rank a paltry 2.75 billion and 2 billion, respectively. Time, and how to make the most of it, appears to be about five times more important to us than making love or money.

And there’s good reason for this obsession. According to a 2015 Gallup survey, 48 percent of working adults feel rushed for time, and 52 percent report significant stress as a result.

Wicked Solutions to Wicked Problems

As of late 2016, with the initial phases of the research completed, the study came to two overarching conclusions. First, creativity is essential for solving complex problems - the kinds we often face in a fast-paced world. Second, we have very little success training people to be more creative. And there’s a pretty simple explanation for this failure: we’re trying to train a skill, but what we really need to be training is a state of mind.

Chapter 3: Why We Missed It

The Pale of the Body

In the late 1990s, University of Edinburgh philosopher Andy Clark was researching cyborgs when he realized we were closer to that man-machine merger than anyone wanted to admit. If you have a pacemaker, cochlear implant, or even a pair of eyeglasses, you’re using technology to upgrade biology. What Clark found strange was that no one seemed to notice these developments. Type “cyborg” into a search bar and the first thing that pops up is “a fictional or hypothetical person whose physical abilities are extended beyond normal human limitations by mechanical elements.” But there’s nothing fictional about eyeglasses or smartphones (or, for that matter, artificial hearts and bionic limbs). So why, Clark wanted to know, haven’t we acknowledged that we’re already becoming cyborgs?

The Pale of the State

After meeting that woman, he’d done a back-of-the-envelope calculation comparing the injuries and deaths caused by horseback riding - which he dubbed “*equasy*” - to those produced by MDMA. But even when he discounted the downstream costs of drug use such as addiction, violent behavior, and traffic accidents, his numbers showed the dangers of *equasy* and *ecstasy* several orders of magnitude apart. For every 60 million tablets of MDMA consumed, Nutt found 10,000 adverse events, or one for every 6,000 pills popped. He then compared that number to

the 1-in-350 tally for horseback riding and published the results.

Headlines across the country read: “British policy doctor claims ecstasy is safer than riding a horse.” Tabloids had a field day. ...Yes, for Nutt, what he was saying wasn’t incendiary, it was simply the facts. “Ecstasy is a harmful drug,” he explained in his 2012 bestseller, *Drugs--Without the Hot Air*. “But how harmful? As harmful as drinking five pints of beer? As harmful as riding a motorbike? David Spiegelhalter, a professor of risk communications [at Cambridge University], has calculated that taking an ecstasy pill is as dangerous as riding a motorbike for about six miles or a [pedal] bike for twenty miles.

In very simple terms, the states of consciousness we prefer are those that reinforce established cultural values. We enshrine these states socially, economically, and legally. That is, we have *state-sanctioned states of consciousness*. Altered states that subvert these values are persecuted, while the people who enjoy them are marginalized.

Part Two: The Four Forces of Ecstasis

No one dances sober, unless he is insane. --Cicero

Chapter 4: Psychology

Mad Men

Nowhere did this urge for raw self-expression show up more visibly than at Esalen, the Big Sur, California-based institute that the *New York Times* once called the “Harvard of the Human Potential movement.” So central was Esalen to the evolving identity of that generation that the popular TV show *Mad Men* ended with its main character Don Draper experiencing an epiphany on its oceanside front lawn.

So Erhard repackaged an assortment of Esalen-inspired practices into a business-friendly format, creating EST, short for the Erhard Seminars Training. The seminar deliberately reproduced Price’s accidental transformation, engineering a “breakdown-to-breakthrough” experience via a series of marathon, fourteen-hour days, without food or breaks, and with lots of yelling and profanity - the fabled “EST encounter.”

Margin note: Tony?

Prior to Erhard, most spiritual seekers skewed anti-establishment and antimaterialist - which is fine if you’re living in a monastery or off a trust fund, but problematic if you need to make a living. And even more problematic if you’re trying to sell seminars. In the same way that Henry Ford realized his workers had to be able to afford one of his Model T’s for his company to thrive, Erhard understood that seekers needed to be financially successful enough to afford his next workshop. So he hitched the human potential movement to the wagon of the Protestant work ethic. Napoleon Hill’s *Think and Grow Rich* replaced *Bhagavad Gita* as seminal text. Mandalas were out. Vision boards were in. And the American spiritual marketplace has never been the same.

If you’ve ever hired a personal or executive coach (professions that didn’t exist before the late 1970’s), heard someone say they “just needed space,” been encouraged to “take a stand” or “make a difference,” or engaged in a journey of “transformation” around your “personal story” - you’ve come across terms coined or popularized by Erhard and his trainings. And with this expansion of vocabulary and emphasis on material success, what had been formerly “other,” that is, couched in the esoteric language of Asian religions and incompatible with the American dream, became us - part of our everyday vernacular, and accessible to all.

While EST itself made an impact, with almost one million people going through those original seminars, Landmark, the latest incarnation of Erhard’s teachings, pboasts corporate clients including Microsoft, NASA, Reebok, and Lululemon.

Taking the Kink Out of Kinky

Justin Dawson, the CEO of OneTaste

Yet, in 2015, OneTaste notched a placement on the Inc. 5000 - an annual ranking of high-growth companies.

Ane momentary erotic transcendence can bring lasting change. A 2013 Dutch study found that kinky sex practitioners “were less neurotic, more extraverted, more open to new experiences, more conscientious, less rejection sensitive, and had higher subjective well-being.”

Good for What Ails You

Since then, the program has been formalized, and more than a thousand soldiers have taken part. Hundreds of veterans and surfers have volunteered their time, including eleven-time world champion Kelly Slater. And their investment paid off. In a 2014 paper published in the *Journal of Occupational Therapy*, Rogers reported that after as little as five weeks in the waves, soldiers had a “clinically meaningful improvement in PTSD symptom severity and

in depressive symptoms.”

And surfing isn't the only non-pharmacological intervention to show promise. A recent study done by the military found that 84 percent of PTSD subjects who meditated for a month could reduce or even stop taking selective serotonin reuptake inhibitors (SSRIs). In contrast, the control group - who didn't meditate and stayed on antidepressants - experienced a 20 percent *worsening* of PTSD symptoms during that same period.

Chapter 5: Neurobiology

I Can't Feel My Face

In study after study, when seriously depressed patients received Botox injections in their frown lines, they got significant and sometimes instantaneous relief from depression. But when Botoxed subjects were asked to empathize with other people, to feel their joy or share their sorrow, they simply couldn't.

And now we know why. Our facial expressions are hardwired into our emotions: we can't have one without the other. Botox lessens depression because it prevents us from making sad faces. But it also dampens our connection to those around us because we feel empathy by mimicking each other's facial expressions. With Botox, mimicry becomes impossible, so we feel almost nothing at all.

Precognition Is Here (But You Knew That Already)

In 2015, we were invited to Southern California to host an event for Nike's innovation group. Every year, to help spark new insights in their own design work, this group goes on creative field trips to learn more about the cutting edges of other fields.

And the armed forces aren't the only ones interested in finding better ways to predict what's around the bend. In a related study run in Barcelona, Spain, researchers at the ESADE Business School (twice ranked the top business school in the world by the *Wall Street Journal*) wanted to know if they could identify “emergent leadership” long before their students graduated. So Berka and her team took thirty-five MBA students, hooked them up to EEG and HRV monitors, and gave them a case study to solve.

Once again, by examining the neurophysiological profile of these students, Berka was able to identify “emergent leaders” - those individuals who would have an outsize positive impact on the team and its decision making - in as little as thirty minutes. While there was no correlation between emergent leadership and how much students talked or even what they said, there was a direct relationship between their neurophysiological responses and those of their classmates. Transformational leaders not only regulated their own nervous systems better than most; they also regulated other people's.

In the same way that multiple clocks on a wall end up synchronizing to the one with the biggest pendulum, emergent leaders can entrain their entire teams and create a powerful group flow experience.

OS to UI

Choices like these are available not just in our personal lives, but in our professional lives, too. Instead of nervously waiting for a job interview and obsessing about all the things that could go wrong, we can take a page out of Amy Cuddy's book and stand up, breathe deeply, and power-post our way to lower cortisol, higher testosterone, and more confidence. Instead of using trendy leadership books and a new mission statement to fire up employees, we can follow ESADE's lead and use neurofeedback to heighten group coherence and prompt more productive strategy sessions.

Chapter 6: Pharmacology

The Johnny Appleseed of Psychedelics

Published in 1991, *PiHKAL* was divided into two parts. The second book, *TiHKAL*, came out in 1998.

Chapter 7: Technology

Things That Go Boom in the Night

To track how much music people listened to at home (on average, four and a half hours a day) and what happened while they listened, they rigged thirty homes with Sonos speakers, Apple watches, Nest cams, and iBeacons. When tunes were playing, the distance between housemates decreased by 12 percent, while the chances of cooking together increased by 33 percent, laughing together by 15 percent, inviting other people over by 85 percent, saying “I love you” by 18 percent, and, most tellingly, having sex by 37 percent.

The Digital Shaman

His most recent project, appropriately named *MicroDoseVR*, is an immersive VR game offering an atom's-eye

tour through many of Shulgin's alphabetamine compounds. Zooming through that digital world, surrounded by deep trance music and the actual "molecules of desire," the simulation is more than enough to knock you out of regular awareness.

The Flow Dojo

As powerful as these advancements are independently, when blended together, their impact is amplified considerably. It's why, over the past several years, we've been collaborating with some of the top experience designers, biohackers, and performance specialists to help develop the Flow Dojo - a training and research center explicitly designed to merge these technologies in one place. Equal parts Cirque du Soleil, X Games, and hands-on science museum, it's a learning lab dedicated to mapping the core building blocks of optimum performance.

In the fall of 2015, we had the opportunity to bring a prototype of the Dojo to Google's Silicon Valley headquarters and engage in a joint-learning project. For six weeks, a handpicked team of engineers, developers, and managers committed to a flow training program, and then capped that off with two weeks in a beta version of the training center.

The premise was simple: if you train your body and brain, and manage your energy and attention, you'll be able to get into flow more frequently and perform better at work and at home. Each day, participants engaged in a range of activities, from sleep tracking, to diet and hydration, to functional movement (designed to undo the imbalances of deskbound lives), to brain entraining audio and respiration exercises. With just those basic practices, subjects reported a 35 to 80 percent increase in incidents of flow during their workdays. The bigger surprise for the engineers was that they also experienced more flow at home, where family dynamics were frequently less rational and predictable than the algorithms they played with at work.

Once that foundation was in place, we got to the interesting part - the Dojo itself. In our research for *The Rise of Superman*, we had interviewed more than two hundred professional and elite adventure athletes to figure out their secret to getting into flow so readily. Time after time, they told us it came down to two things: the right triggers and gravity.

And that's where the team began the design of the Flow Dojo. Was it possible to use technology to simulate those conditions in a safer and more accessible way? Could we take a page out of Alan Menti's iFly book and recreate the embodiment, and consequences that the world's best flow hackers relied on, to give regular folks a taste of the state? By combining Tony Andrew's sound design, Android Jones' digital imagery and Mikey Siegel's brain tech, could we construct a novel and interactive environment? If so, we could guide users into peak states, and researchers could capture invaluable data along the way. This would provide a unique opportunity to study the impact of wearables, experience design, and user biometrics, all in the same place. We could literally start reverse-engineering the genome of peak performance states.

So, we brought together a team of engineers to develop kinetic training gear that could deliver those experiences - think extreme playground equipment built for grown-ups. Giant looping swings that send you upside down and twenty feet off the ground, and pull more than three g's when you push through the arc's bottom. Momentum-powered gyroscopes and surf swings, complete with Doppler sound effects and LED cues, that let you flip, spin, and twist without risking a hospital visit.

The designers also integrated sensors and audio-visual feedback into the gear, so users get real-time data on physics (like g-force, RPM, and amplitude) and personalized biometrics (like EEG, HRV, and respiration). Taking that kind of data off smart watches and laptops - and away from the conscious mental processing of the prefrontal cortex - gets users out of themselves and into the zone with less distraction.

Even so, when Sergey Brin, one of Google's cofounders, stepped up to the looping swing, we were unsure how it was going to go. Brin is an action sports enthusiast, pursuing everything from BASE jumping to kitesurfing. At the TED conference a few years ago, he also topped the leaderboard on an EEG mindfulness training demo. So, while he already had some experience in both the physical and mental elements of this training, he had never put the two together.

First, we hooked him up to a heart rate variability monitor to establish a cardiac baseline. Then he strapped into the kiteboard bindings and began pumping the looping swing higher and higher. Most people encounter two limits on this device. The first is when they reach the highest point they ever attained on a playground swing, typically about 50 degrees. If they can push past that last known safe zone, the next limit is actually when they're straight upside down and needing to drive their weight forward (against all better judgment when you're twenty feet off the ground) to push the swing through a full revolution.

Brin pumped past both of those limits, looping the swing (only about 5 percent of subjects manage that feat on their first attempt), and then proceeded to stall the swing at its apex, and loop it blind and *backward*. When we compared his biofeedback data from his sessions to his baseline, he had lost coherence when he was initially exerting himself, but had regained an organized brain and heart rhythm once his body-knowledge figured out how to adapt and adjust. His only comment when he returned back to earth? “I want one in my backyard.”

Part 3: The Road to Eleusis

Chapter 8: Catch a Fire

The Sandbox of the Future

There’s Tony Andrews in purple paisley, bumping bass out of a Funktion-One art car. Mikey Siegel’s around, too, demonstrating neurofeedback to the dusty and the curious. Android Jones has erected a giant dome to display his trance-inducing visionary art.

When the Levee Breaks

Over in Nevada, meanwhile, it was sunny skies and light winds and Burning Man was in full swing. Camp PlayaGon (a combination of “*playa*” and “*Pentagon*”) was bustling. A collection of high-ranking Pentagon officials, futurists, and hackers, PlayaGon had been charged with setting up and running the livestream broadcast and emergency Wi-Fi for the entire festival. But when news of Katrina reached them, they took a break from their duties to get a closer look.

“**One of our guys took over a recon satellite,**” recounts Dr. Bruce Damer, a University of California biomedical engineer and NASA contractor. “Our Pentagon wireless satellite phone rang, the general on the other side was saying ‘what’s going on’ and instructing our guy not to answer. We then had control of this thing and could watch Katrina come in.” And never ones to miss an opportunity for a high-tech prank, the PlayaGon crew lit dozens of hydrazine flares (military-spec glow-sticks) around their camp and programmed the satellite to track the blaze from space, too.

A large man with long, graying hair and beard, Warner has a resume that reads “former U.S. Army drill instructor . . . PhD neuroscientist, technotopian idealist, dedicated Burner, dabbler in psychedelics, insatiable meddler and (weirdest of all) defense contractor.”

Warner and a gang of MIT scientists, who called themselves the Synergy Strike Force, had posted up in Jalalabad to spread “the gospel of open information.” Based on the Burning Man principle of radical inclusion, Warner insisted that all Synergy Strike Force projects remain unclassified and that the information be shared with everyone. “I’m dismantling the Death Star,” he told a war reporter, “to build Solar Ovens for Ewoks.”

So, Warner opened a “Burner bar,” where he traded free drinks for terabytes of information. It was more of a Tiki hut, really - covered in bamboo, a simple cooler with some Heineken and the odd bottle of liquor displayed, but also a sign that read “We share information, communication (and beer).”

In their intelligence gathering, no detail was too small: reconstruction projects, troop movements, construction plans, hydrology surveys, health clinic locations, polling sites, names of local farmers, even crops those farmers were planting. Warner took all the information from his “Beer for Data” program (as it came to be known) and plugged it into a data-visualization tool he had created. The results outperformed every three letter agency you can think of, and - because Warner had refused a security clearance - he could “gift” anyone who asked with these results.

Lots of people asked. The Pentagon relied on his data, but so did the United Nations, Afghan officials, aid workers, and journalists. In one of the most chaotic environments in the world, gifting, transparency, and radical inclusion saved lives and dollars.

While Burners without Borders and Beer for Data mark two of the earliest examples of festival principles being exported into crisis zones, they’re unlikely to be the last.

It’s for this reason that Rosie von Lila, a former head of community affairs for the Burning Man organization, has been invited to the Pentagon three times and the United Nations twice to discuss infrastructure and disaster planning.

Disrupting the Brahmins

“We find the right mix of really interesting people and subject them to powerful state-changing experiences that accelerate social bonding.

And getting innovators into their “right minds” is what Summit, MaiTai, and Branson have done so well. By realizing the non-ordinary states are more than just a recreational diversion and can, in fact, heighten trust, amplify

cooperation, and accelerate breakthroughs, a new generation of entrepreneurs, philanthropists and activists is fundamentally disrupting business as usual.

High Times on Main Street

In one twenty-four-hour beta test, more than thirty thousand people volunteered to contribute their personal data to Alzheimer's research, making it four times the size of the next-largest study overnight.

Chapter 9: Burning Down the House

The Atomic Donkey

—In primates, Lilly had discovered that the pleasure system - what could be called the brain's basic ecstatic circuitry - correlated directly with the sexual arousal network. Male monkeys trained to use his device for self-stimulation would choose to orgasm non-stop for sixteen hours, followed by eight hours of deep sleep, after which they would get right back to it. Pleasure, Lilly had discovered, was an endlessly motivating and potentially all-consuming pursuit (at least in males).

Long before Linus Torvalds gave away the source code to Linux, or **Sasha Shulgin** published his chemical cookbook, or Elon Musk shared all of Tesla's car and battery patents - long before there was even a term for it - Lilly took a stand for open-sourcing ecstasis.

Spooks to Kooks

It turns out that more than a few of those Pentagon officials who came knocking on Lilly's door were funded by the CIA. They were part of MK-ULTRA, arguably the largest and most notorious brainwashing project in U.S. history. Some eighty institutions, including universities, colleges, hospitals, prisons, and pharmaceutical companies, took part. Their goal was to find chemicals that could control and confuse enemy combatants, civilian populations, and heads of state - including on *Spy vs. Spy* plan to slip Fidel Castro an LSD-soaked cigar.

"Within the CIA itself, [agents] were taking LSD regularly, tripping at the office, at Agency parties, measuring their mental equilibrium against those of their colleagues," Jay Stevens recounts in *Storming Heaven*.

As background research for his novel *One Flew Over the Cuckoo's Nest*, which was set in a mental institution, Kesey had been volunteering at a U.S. Veterans Administration hospital (which, unbeknownst to the young author and many of the administering doctors, was part of MK-ULTRA). To earn a little extra money, a friend of his had turned him onto the \$75 per session experiments the docs were running there on "psychomimetic" drugs - meaning chemicals like LSD that mimicked the mental breakdown of psychosis. The scientists "didn't have the guts to do it themselves," Kesey later told *Stanford Alumni* magazine, "so they hired students. When we came back out [of the sessions], they took one look at us and said, 'Whatever they do, don't let them go back in that room!'"

Over on Perry Lane, the bohemian cottage enclave where he lived, Kesey and his growing band of pranksters took things out of the lab and into the field. "Volunteer Kesey gave himself over to science at the Menlo Park vets hospital," Tom Wolfe recounts in *The Electric Kool-Aid Acid Test*, "and somehow drugs were getting up and walking out of there and over to Perry Lane."

"Half the time," Wolfe continues, "Perry Lane would be like some kind of college fraternity row with everybody out on a nice autumn Saturday afternoon on the grass... playing touch football... an hour later Kesey and his circle would be hooking down something that in the entire world only they and a few other avant-garde neuropharmacological researchers even knew about."

What happened next became the well-documented subject of counterculture lore. Kesey moved the experiment into the hills above Palo Alto, Hunter S. Thompson, the Hells Angels, and Neal Cassady (from Kerouac's *On the Road* fame) all showed up, as did a strange little band called the Grateful Dead, led by a chinless but oddly magnetic guitarist named Jerry Garcia. Armed with gallons of day-glo paint, strobe lights, and the prototypical art car, a tricked out 1939 International Harvester bus named "Further," Kesey and his Merry Pranksters birthed West Coast psychedelic culture. Control of the Master Switch had been wrestled away from the spooks, and neither Silicon Valley nor the wider world would ever be the same.

A couple of years later, the Pentagon commissioned the Trojan Warrior Project, an intensive six-month training in mind-body-spirit practice for Green Berets. The program included meditating with a Tibetan lama, neuro and biofeedback sessions in a cutting-edge computer lab, praying with a Benedictine monk, and training in aikido, a Japanese martial art dedicated to universal peace. It was a frontal assault on the neurophysiology of ecstasis (and the direct progenitor of the SEAL's Mind Gym).

And it's still churning today. Consider the government's clandestine role at Burning Man. On the surface, the

festival - a one week gathering on an utterly forgettable patch of U.S. Bureau of Land Management desert - is not what you'd consider a "high-value target." But for the short few days of its existence, the event holds the dubious distinction of being one of the most surveilled cities in the country. Despite experiencing less violent crime than most midsize suburbs, it draws over a dozen separate state and federal agencies equipped with millions of dollars of high-tech spy gear, infrared goggles, tactical vehicles, and undercover agents.

In heavily redacted documents recently released through the Freedom of Information Act, it turns out that the FBI has conducted a multiyear intelligence program at Burning Man. The official reason was to scout for domestic terrorists and track potential threats from Islamic extremists. More likely, the FBI was taking a page out of their old COINTELPRO playbook, the one used in the 1960's to infiltrate and destabilize the Black Panthers, Students for a Democratic Society, and the American Indian Movement. If that were the case, then one would expect increased surveillance of the event, heightened policing, insertion of agents provocateurs, and aggressive prosecution of nonviolent crimes. And while it's hard to tell if it's an anomaly or the beginning of a trend, in 2015, plainclothes and undercover agents spiked, and arrests at the festival were up 600 percent.

It seems safe to say that the intelligence community knows something big is happening out in the desert, they just can't quite figure out what. That's because, other than the obvious external cues - the fiery explosions, wild costumes, and all-night dance parties - what's really going on is happening in people's minds. To the rank-and-file law enforcement monitoring, "the festival, it must seem like a rowdier Mardi Gras, or a Times Square New Year's with fewer drunks and more hugging." But not so for the top brass. In some instances as we saw when Camp PlayaGon commandeered a spy satellite, and the Supreme Commander of NATO attended the event, they're in on it.

And this repeated pattern of the "spooks lying down with the kooks," from hippie float tanks at the SEALs' Mind Gym, to Kesey's misadventures at the V.A. hospital, to Lieutenant Colonel Channon hottubbing at Esalen, to the Pentagon at Burning Man, clearly highlights the back and forth contest for control of the Master Switch.

Soma, Delicious Soma!

A global consortium of just about every major brand you can think of - from Coca-Cola, Wal-Mart, and Procter & Gamble to creative agencies like J. Walter Thompson, Ogilvy & Mather, and Omnicom, to tech giants like Facebook, Google, and Twitter - the foundation wanted to learn about the use of flow in advertising. COuld this state of consciousness play a role in prompting buying behavior? Could the mechanics of ecstasis be used to drive market share?

To understand this possibility, it's helpful to understand a few of the developments that have led to today's marketplace. At the tail end of the twentieth century, we started moving from the selling of ideas, the so-called information economy, toward the selling of feelings, or what author Alvin Toffler called the "experience economy." This is why retail shops started to look like theme parks. Why, instead of stocking ammo on the shelves like Wal-Mart, the outdoor retailer Cabela's turns their stores into a hunter's paradise of big-game mounts, faux mountainsides, and giant aquariums. It's how Starbucks can charge four dollars for a fifty-cent cup of coffee: because they're providing that cozy "third place" between work and home.

But we were at the Advertising Research Foundation to discuss the next step: the move from an experience economy to what author Joe Pine calls the "transformation economy." In this marketplace, what we're being sold is who we might become - or as, Pine explains: "In the transformation economy, the customer IS the product!"

On the surface, the idea that we would favor products that could help us become who we want to be doesn't sound bad. Take the fitness industry. In the experience economy, one of the undisputed leaders is Equinox Gyms, which blends state-of-the-art equipment, boutique lobbies, and eucalyptus steam baths to create a luxury workout. You may or may not get as lean as those models in the black-and-white photo spread, but you'll certainly feel like a million bucks while you're there.

In the transformational economy, CrossFit charges almost as much but offers none of those perks. Instead, what you get is the promise that after three months of sweating in their stripped-down boxes (as CrossFitters call their workout spaces), you'll become a radically different person. You'll look different, for certain, but because of their emphasis on embracing challenge and pushing boundaries, you'll stand a chance of acting and thinking differently as well. That's a positive "transformation" that many are willing to suffer and pay a premium for.

Yet, it doesn't take much to bend this desire for personal change in more commercial directions. Consider a recent Jeep campaign, where they built mud bogs at county fairs. With thumping music and flashing lights amplifying the joyride, Jeep let fairgoers hop into one of their stationary rigs, floor the motors, spin the tires, and send dirt flying. The novelty of the experience; the rapid shift in sensations; the lights, music, and cheering crowds,

was all more than enough to trigger the brain's pleasure machinery and get red-blooded twenty-somethings fixating over no-money-down leasing options for weeks to come.

That Jeep campaign worked so well because it effectively created a state of peak arousal for its participants and then sold them on an imagined transformation of their lives (starting with the purchase of a 4x4). Under those amped-up conditions, salience - that is, the attention paid to incoming stimuli - increases. But, with the prefrontal cortex down-regulated, most impulse control mechanisms go offline too. For people who aren't used to this combination, the results can be expensive.

The video game industry may have gone further down this path than anyone. "Games are a multi-billion dollar industry that employ the best neuroscientists and behavior psychologists to make them as addicting as possible," Nicholas Kardaras, one of the country's top addiction specialists, recently explained to *Vice*. "The developers strap beta-testing teens with galvanic skin responses, EKG, and blood pressure gauges. If the game doesn't spike their blood pressure to 180 over 140, they go back and tweak the game to make it have more of an adrenaline-rush effect. . . . Video games raise dopamine to the same degree that sex does, and almost as much as cocaine does. So this combo of adrenaline and dopamine are a potent one-two punch with regards to addiction.

Ecstasy Wants to Be Free

It's there in the democratizing effects of Mikey Siegel's consciousness-hacking meet-ups, it's why OneTaste has built an Orgasmic Meditation app downloadable anywhere in the world, it's what fuels the volunteers of the Burning Man diaspora.

Chapter Ten: Hedonic Engineering

Hedonic Calendaring

According to the National Institutes of Health, 74 percent of American men and 33 percent of children are now overweight or obese.

Step One: List everything you love to do (or that you'd like to do) that gets you out of your head. Action sports, yoga, live music, sex, brain stimulation, meditation, personal growth workshops, adventure travel, etc. This may seem simple, but if you consider the breadth of the Altered States Economy and the fact that we tend to compartmentalize the many different ways we modulate consciousness, putting it all down in one place can lend some fresh perspective.

Conclusion

An Afterthought

____ We also offer intensive trainings to unlock personal and organizational high performance

www.stealingfirebook.com