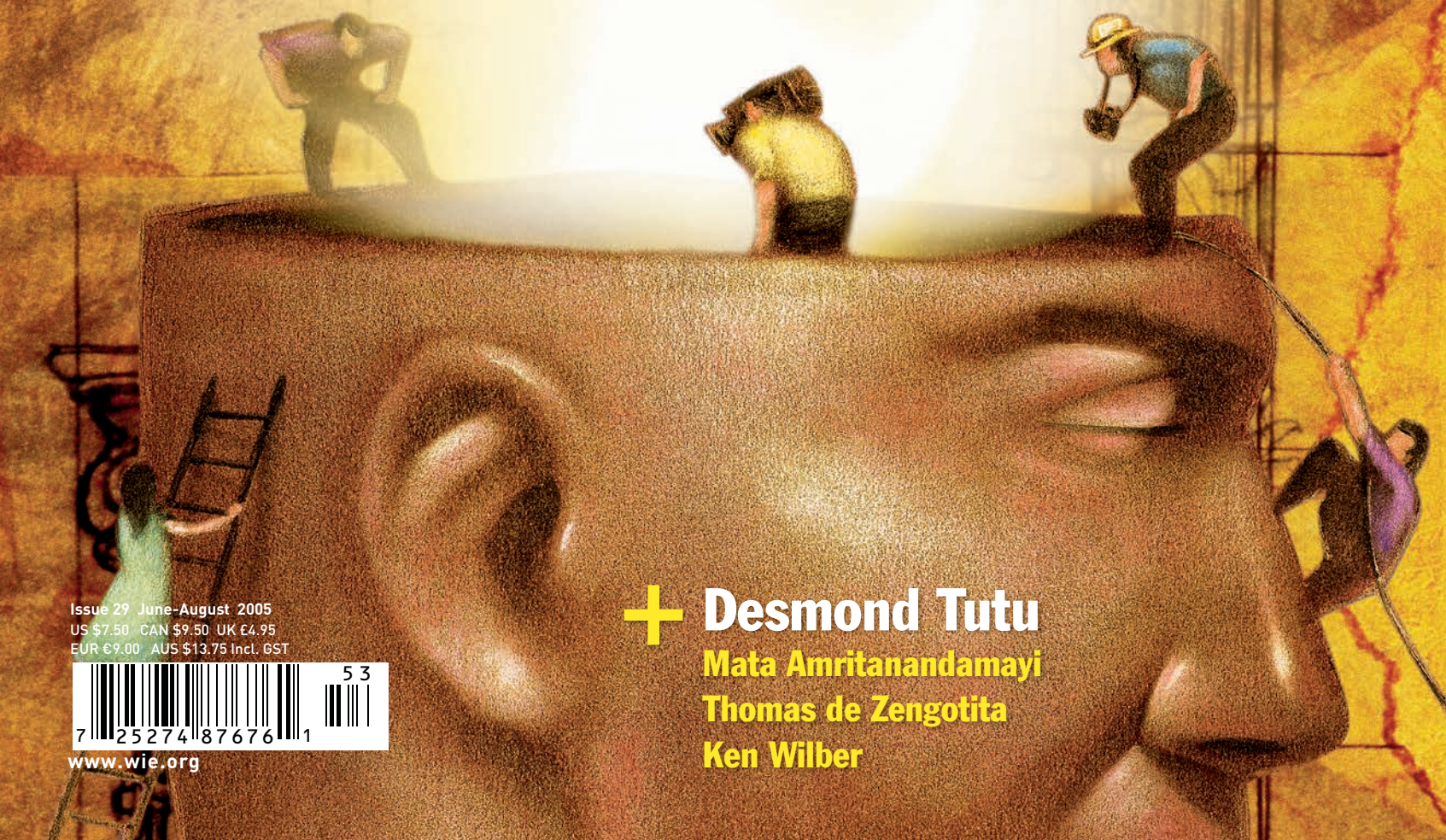
what is enlightenment
redefining spirituality for an evolving world

WHO ARE YOU?

Science's quest to solve the mystery of consciousness



+ Desmond Tutu
Mata Amritanandamayi
Thomas de Zengotita
Ken Wilber

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what is enlightenment magazine

What Is Enlightenment? is dedicated to a revolution in human consciousness and human culture. Guided by the always-evolving vision of founder Andrew Cohen, whose tireless passion for spiritual inquiry continues to push the edge of contemporary thinking, we are in search of a radical new moral and philosophical architecture for twenty-first-century society. We believe that finding this framework for transformation—rooted in the timeless revelation of enlightenment, reaching toward a truly coherent ethics for the postmodern world—is imperative, not only for the evolution of our species, but for our very survival. By asking the hard questions of the new science and the ancient traditions, of art and culture, of business and politics, *What Is Enlightenment?* seeks to create a dynamic context for conscious engagement with the greatest challenges of our times, a groundwork for the ongoing liberation of human potential.

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Issue 28
March-May 2005

A NEW SOCIAL RESPONSIBILITY

"The Business of Saving the World," by Elizabeth Debold, was a splendid article. As a management consultant in the area of culture transformation, I have been intent on supporting a shift in some of the world's largest corporations towards a new definition of social responsibility. I have consistently seen CEOs stymied by the unrelenting demand for quarterly profits and absolutely crippled by the day-to-day demands of running complex business machines.

The jury is out as to whether we can change business from the inside out or an entirely new model is needed. Examples like Interface, Mark Benioff's work, and The Body Shop give us hope. Ultimately, I believe the human spirit will demand that business interact with the larger social and political environment in mutually beneficial ways that are unimaginable today. Those companies that lead the way in creating this new way of doing business will enjoy both the ethical and economic benefits that will accrue.

Send your letters to letters@wie.org or PO Box 2360, Lenox, MA 01240 USA

Thank you very much for your work and your commitment to broadening the range of consciousness in daily life.

Thomas D'Aquanni
via email

INSPIRING LEADERS TO EVOLVE

I read with great interest and enthusiasm the article by Elizabeth Debold entitled "The Business of Saving the World." As a management consultant myself, I was most struck by the fact that there are many others in our industry who are out there contributing to the evolution of consciousness through their work with corporate clients, a mission that touches the lives of thousands and thousands of people. This growing army of consulting warriors is inspiring leaders around the world to evolve and do great things.

Debold seems to have emphasized the environmental side of the equation more than the people side, which I would have liked to hear more about. "Awakened" people tend to be more creative and certainly more attuned to the planet—if you want to save the planet, transform people. I know Richard Barrett, a brilliant and very spiritual being, and what I like the most about what he is doing is that he is training other consultants to go out and have their own impact on people in companies.

Miles Kierson
via email

BALANCING ACT

My congratulations on "The Business of Saving the World." I have long been a student of Senge, Jaworski, etc., and your article defines the challenge in meaningful terms that are neither totally pessimistic nor totally optimistic. Both the scope of the article and your efforts to find all of these people and then organize the material are most impressive.

Philip Davidson
via email

EGO ECONOMICS

Howard Bloom's article "Reinventing Capitalism" was something I'd expect out of a right-wing Murdoch spread, not a magazine purporting to be at the forefront of evolutionary insight. In it, Bloom has the audacity to claim that capitalism is democratic, free, and has the ability to benefit the whole of mankind. But there is no analysis, scientific or otherwise, to back up his claims.

Bloom blindly declares that "capitalism works," and for him and the rich minority in capitalist countries, it may well do. But I'd like him to tell the sixty thousand people who die unnecessarily every day from malnutrition and preventable diseases that it works, or tell the majority of mankind that is forced into underpaid hard labor day after day, without security, to "hang in there" while the system sorts itself out.

Capitalism is the direct expression of ego in the material world, one based on exploitation and division in the pursuit of unnecessary luxuries for the few at the expense of the many. The capitalist system is now facing a huge crisis as it begins to contort under its self-made contradictions. It has overstayed its historical role, and it is time to destroy it before it destroys us.

Andrew Alexander
London

A HEALTHY DOSE OF OPTIMISM

After viewing the documentary film *The Corporation* and feeling complete

despair, it was refreshing to read your cover story, "The Business of Saving the World." The movie leads one to believe that once a corporation is formed, no good can possibly come from it. But your research gives me hope that profits and good work can not only live at the same address, but will be "required" if a company is to be sustainable.

Mary Hunt
via email

BODYBUILDING GETS ITS SPIRITUAL DUE

I applaud your selection of Shawn Phillips for Issue 28's "Beyond Limits." It was very exciting to me to finally see bodybuilding recognized as a spiritual practice. Like Shawn, I first got into bodybuilding for very ego-driven and superficial reasons. Very quickly, I found myself immersed in a subculture of drug abuse and excess. It wasn't long, however, before I realized that I didn't share the values or aesthetic ideals of other bodybuilders and that I didn't have to be part of that group to practice the sport.

Lifting alone, over the years I found that not only had I developed my physique beyond my genetic predisposition, but I had also developed an unbelievable attunement with my body, the nutrients and chemicals that affect it, and the currents of energy that flow within and without it. Beyond all, I realized that the real training was mental in nature and dealt with the inseparable relationship between mind and body. Through concentration, visualization, goal-setting, awareness, and meditation, bodybuilding became central in my spiritual development.

I agree with Shawn—people should look at weight training with the same spiritual connotations as they do yoga or the martial arts.

Alex Villegas
Irving, TX

REMEMBERING TEASDALE

I want to thank you not only for what is in my considered opinion the best *WIE* issue to date with your new format, but also want to express my heartfelt gratitude for your excellent memorial feature on our beloved Brother Wayne Teasdale. I was really struck by your coverage of his saintly life. Anyone who has been in his presence will attest to his complete devotion and surrender to his spiritual practice. Truly he was one who lived as he spoke.

I, too, had the privilege of calling him friend. I cherish the memory of the first Synthesis Dialogues conference in Dharamsala, India, when I took just such a "walk" with Brother Teasdale as you described in your article. As we walked and talked about spiritual community and related matters, what began as a five-minute walk dispensed with time and embraced eternity. Our communion simply transcended

words. And as much as it is possible for words to do so, you totally captured the tenderness of his being, true lover of humanity that he was.
Michael Beckwith
Culver City, CA

SHORTCHANGING JUDAISM

I found it disturbing that in a two-page article on Islamic dietary law, there was no mention of its correlation to Jewish dietary law, which far predates it and has significant parallels. You portray this as if it were simply a humanitarian aspect of Islam and ignore the original rationale for those dietary laws.
Anonymous
via email

IN DEFENSE OF PSYCHOTHERAPY

I really like what you are doing; however, based on the "press" in the magazine, I feel that *WIE* has a very one-sided view towards (well, against) psychotherapy. I am currently in a doctoral program in counseling psychology and have been working as an ad hoc consultant with Integral Institute's Integral Psychotherapy team, and I challenge you to devote an issue to this topic. In my view, the psychotherapeutic tradition, stripped of Boomeritis, is uniquely positioned to root out the ego hiding in the shadows of the personality.
Durwin Foster
via email

THE RADIANT HOPE OF CHAIR SITTERS

To me, the greatest attribute of the future Buddha Maitreya is that he is usually seated on a bench or chair and is thus a radiant symbol that even I can achieve some level of realization while resting my aging Western bones on a chair. I'm sure the Lama Yeshe folks could raise millions from us chair sitters to build their 500-foot counter-example to the pretzel-twisting lotus position. Blessings to the "Maitreya Project"!
Carter Smith
Gardena, CA

GHOSTS IN THE BACKGROUND

When you changed your format and went quarterly, though I was very excited at first to be able to devour twice as much of the wonderful food for thought you have always concocted for us, I realized that something went wrong. Suddenly you turned into a fast-food chain and took away our gourmet delicacies. I am not putting down your writers, who are all extremely talented and incisive journalists. But now that we are only hearing their voices, their side of the story—with the interviewees remaining as ghosts in the background—we the readers are losing the multilateral voice that used to make *WIE* so great.

continued on page 140

Andrew Cohen
What Is Enlightenment?
Founder and Editor-in-Chief

WE AT *WHAT IS ENLIGHTENMENT?* ARE IN THE MIDST of a strange and challenging process: coming up with a new name. The reason for this is that we have grown and expanded in so many different directions recently that not only has it become difficult for us to keep all our different limbs in mind as we put one foot in front of the other, but it's also incredibly confusing for people who are just getting to know the ever-evolving animal that *What Is Enlightenment?* has become. Ever since our early issues, I can't tell you how many letters, subscriptions, and submissions we have received addressed to "Enlightenment" magazine. Many people just seem to miss the "What is . . ." dimension, which is, after all, the whole point! So it's always been a question for us. But recently, as the WIE concept has expanded into a seemingly infinite number of new initiatives (all with their own names)—an international speakers series, an online broadcast service, a graduate program, and a documentary film—bringing everything under one clear banner has become an urgent necessity.

So over the past several months, there have been many brainstorming sessions; we even hired a consultant to help us find our way in this brave new world where even cutting-edge spirituality has to fight for access to the overstimulated senses of a media-besieged populous. There is something oddly humiliating about the self-conscious nature of the struggle to come up with just that right "brand"—for yourself. May God help those of us who are convinced that what we are doing is important enough to compel us to walk that razor's edge between uncompromised authenticity and "shelf snap"!

So next time you find us, don't be surprised if we look just a little bit different. We'll still be the same magazine, created by the same people, who are only doing it for the love of it. And we'll still be inspired by the same audacious vision: to help create a revolution in consciousness and culture.

become all that you can become

America's oldest military academy is getting enlightened about human development

"The right men or women, no matter how few, will find the right hinge in a given situation to change history." Journalist Robert Kaplan penned those words in the *Atlantic Monthly* soon after 9/11, calling on the American military to focus on developing a particular kind of officer—one who could thrive not just on clear orders and simple directives but on the ambiguities and complexities of foreign cultures and far-flung command posts. Kaplan's lesson seems all the more clear after two years in Iraq: Uncle Sam desperately needs individuals who can think on their feet, be both forceful and diplomatic as necessary, and respond to the local environment—be it the Sunni Triangle, southern Kabul, or southwest Colombia—with some measure of real autonomy. And today, a year after soldiers "following orders" in a Baghdad prison managed to dramatically lower America's reputation in the Arab world, the need for officers who can handle themselves amid the contradictions of a complex global society is more urgent than ever.

Enter Colonel George B. Forsythe, West Point Military Academy's Vice Dean of Education. As the nation's oldest military college, West Point has long groomed the future leaders—generals, diplomats, and even presidents—of the United States. ("Much of the history we teach is made by the people we taught" is a favorite expression at the school.) And Forsythe is the primary officer in charge of making sure that the thousands of dollars that go into developing each one of those leaders is money well spent. He knows that the character of the soldiers who filter out of the school after four rigorous years will go a long way toward determining the fundamental character of this nation's army. And he has some novel insights into why some soldiers do the right thing in

tough situations and why others, as in Abu Ghraib, do such terrible wrongs.

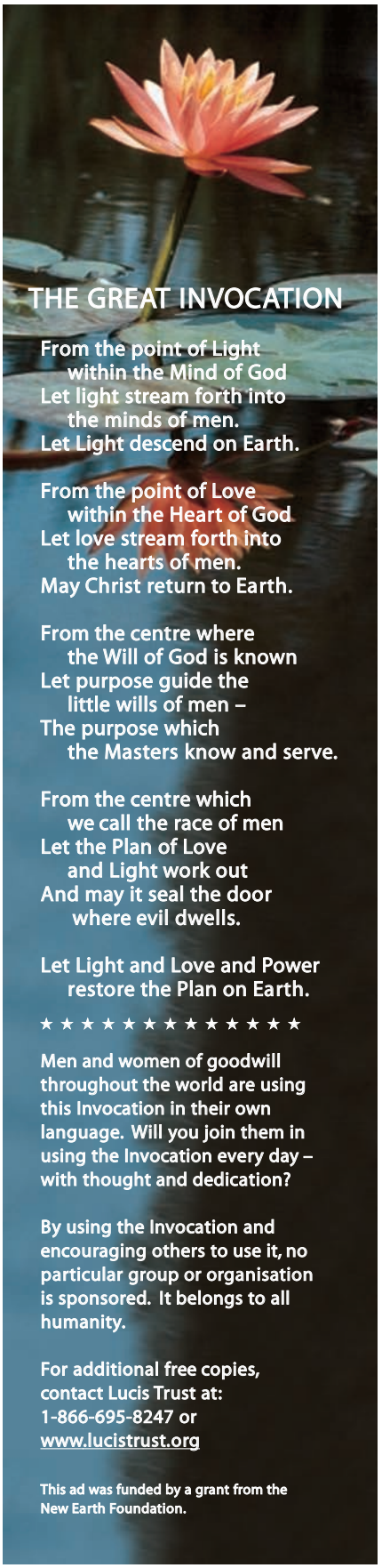
"The tendency is always to say, 'Well, they are bad people,' or 'They have no character,'" he explains. "But it may simply be that developmentally, these soldiers found themselves in a situation in which they were in over their heads." That may not sound like the kind of tough, no-excuses talk we're used to hearing from army brass, but then again, Forsythe is not your usual officer. Working within a culture that prizes regimen and conformity, he's thinking outside the box. He has introduced into this venerable institution a cutting-edge theory of human evolution: the psychological development theory of Harvard professor Robert Kegan, author of *The Evolving Self*. Inspired by such psychological luminaries as Jean Piaget, Lawrence Kohlberg, Carol Gilligan, and others, Kegan has been working for years on what still amounts to a controversial proposition in the halls of academia, much less the military: that human beings go through established hierarchical stages of psychological development; that each stage transcends and includes the lower ones; that this evolution continues throughout human life; and perhaps most radical of all, that as a culture, we are still evolving into higher and higher stages of development.

The need for officers who can handle themselves amid the contradictions of a complex world is more urgent than ever.

So, what do stages of development have to do with soldiers fighting the good fight in the sands of Iraq? The answer to that, Forsythe explains cryptically, lies in two sets of numbers: two-three and three-four. These are numerical references to the stages in Kegan's model and to the transitions between them. For example, did you ever know someone who went off to join the army and came back a more respectable, more honorable, and more socialized young man or woman? Likely, what you were seeing was the result of a stage transition, from stage two to stage three. What that means is that your friend left behind the impulses of a more adolescent phase and began to identify with and internalize the values of their chosen tribe, society, or culture, subordinating their own desires and needs to the values and ideals of a larger group. This is often what we mean when we say that an individual has "grown up."

"Our data suggests," says Forsythe, "that the story of four years at West Point is the story of the two-to-three transition. [It's about] subordinating your needs to the larger good, becoming a team player."

While those are admirable goals, the nation today may simply need more than that from those who walk out of West Point's hallowed halls ready to fight the war on terror. "Professional officers who find themselves in ambiguous situations where the guidance and the external answers are not clear," explains Forsythe, "need to be able to adjudicate those conflicts with an internalized set of values and standards that



Did you ever know someone who went off to join the army and came back a more respectable, more honorable, and more socialized young man or woman?

helps them to regulate themselves." Simply put, they need to be able to think for themselves and come to their own independent conclusions, to follow orders perhaps, but for the right reasons. And that's where the transition from stage three to stage four becomes very attractive, because stage four in Kegan's model is all about personal autonomy. It is in this transition, developmental experts tell us, that individuals begin to acquire their own deeply rooted values, values that give them the moral and psychological footing to dynamically interpret and respond to the world around them. Stage four is the land not of the rebel or loner but of the true individual, and Kegan has found that most adults are in fact struggling to negotiate the transition from stage three to stage four.

To respond to this developmental need, Forsythe and his colleagues at West Point have created the Cadet Leadership Development Program. Its goals are simple and practical, even as they are revolutionary. He is trying to encourage this esteemed institution, built on camaraderie, collectivity, and teamwork, to cross that great Rubicon of personal autonomy: to make the delicate transition beyond the values of the group, the team, the nation, and the tribe into the difficult and dangerous psychological territory of what Kegan calls stage four, or the "self-authoring mind."

"The argument is that a stage-four perspective is more adaptive to the kinds of operational circumstances we're finding ourselves in—different cultures and multiple ways of thinking about military expertise and what the role of the military is," Forsythe says. "So the development of a stage-four perspective is increasingly critical." But how do you change a culture as deeply rooted as the nation's military, where subordinating personal values to the larger cause is almost a religion? And how do you encourage such a change without undermining the very important and effective work done at West Point to inculcate self-sacrifice and crucial team-oriented values in young officers? Forsythe doesn't have all the answers yet, but after twenty years of research, he is more confident than ever that he is on the right track. And he has the ear of high-ranking people in our military, who are trusting him to do the right thing by our would-be officers so that when the time comes, they will, in turn, be prepared to do the right thing by all of us.

So the next time you shake your head at some senseless, unfortunate act by a soldier halfway around the world who has fallen prey to his own worst impulses amid the moral chaos of a confusing and complex global society, take heart. Somewhere in our nation's vast military complex, a few good men are pushing soldiers further up the evolutionary ladder of human consciousness—trying, in their own small way, to change the world one officer at a time.

Carter Phipps

look, ma, it says i'm god!

Can a new breed of children's books awaken your kids to cosmic consciousness?

Are you tired of your children's stifled yawns and drooping eyelids when you try to read them Ken Wilber's latest treatise on postmetaphysical spirituality? Does your unusually precocious Indigo kid have trouble fathoming Sri Aurobindo's critique of Advaita Vedanta? If so, an innovative genre of children's picture books may be just the thing to raise your child's consciousness to radically new spiritual heights.

With titles like *Born with a Bang: The Universe Tells Our Cosmic Story* and *All I See Is Part of Me,* this distinctive class of kids' books represents what must be the latest defensive tactic of "spiritual but not religious" parents everywhere—inculcating children in the ways of Carl Sagan and Eastern philosophy before they even have a chance to learn about Noah's Flood. Spanning epic tales of cosmic evolution and esoteric explanations of God, it is a genre that encompasses both scientific naturalism and nondual mysticism—usually seen as two opposing currents in the philosophical stream. But despite any apparent contradictions among them, these books all express visions of universal Oneness and are clearly aligned in their fundamental cause: to awaken children to a sense of the sacred in the midst of a secular world.

"I tried to distill big abstract ideas into very pure, simple phrases, so simple that a child might understand them," says Martin Boroson, author of *Becoming Me: A Story of Creation.* "I also tried to keep a sense of innocence and avoid language that was tied to any particular tradition." Boroson says the idea for *Becoming Me* came to him one evening while he was meditating, when he "realized it might be possible to convey the mystical idea of transcendence and immanence in the form of a children's book—a story in which God, who is infinitely big, really likes being little." Narrated in the first person by God (who remains unnamed as such), this lavishly illustrated story follows God's divine play as he grows tired of being the only thing in existence and so transforms himself into the manifest world of duality and multiplicity, culminating in the creation of you, the reader, whom God calls "little Me." In other words, it's an exegesis on nondual mysticism for kids—pointing young potential sages everywhere toward the realization that the transcendent Creator and his creation are ultimately One. Other books of this kind that clearly espouse nonduality include *What Is God?* by Etan Boritzer, the aforementioned *All I See Is Part of Me* by Chara M. Curtis, and *Because Nothing Looks Like God* by Lawrence and Karen Kushner.

If you're uncomfortable with the idea of a spiritual source of creation and prefer to stick to more scientific ground, then a trilogy of picture books written by Jennifer Morgan and illustrated by Dana Lynne Andersen may be more appropriate for the impressionable minds under your guard. Like the best of the nonduality books, Morgan's series is written in the first person, but from the viewpoint of the universe rather than that of an explicitly transcendent

"I realized it might be possible to convey mystical ideas in the form of a children's book—a story in which God, who is infinitely big, really likes being little."

MARTIN BOROSON

God. "I am the Universe and it's time for us to get to know each other," says the omnipresent narrator in *Born with a Bang*. "After all," it continues, "I'm 13 billion years old now . . . and how old do you think *you* are? Nine? Thirteen? How about 13 billion years old too! You are a part of me—you are part of the Universe. You have never been separate from me. That's why I'm going to tell you a story about me, which is about you too." Despite such sentiments' apparent pantheism—the belief that "God" is synonymous with the natural universe—it isn't clear why a merely natural cosmos should be so happily self-aware. In fact, Morgan's books appear to fall somewhere along the hairsplitting divide between pantheism and *panentheism*—the idea that the universe is pervaded by a divinity, spirit, or conscious intelligence that is ultimately transcendent. It is a worldview in which the scientific and the spiritual interpretations of reality suddenly find themselves not at all opposed.

Even the more mystical *Becoming Me* "is consistent with scientific theories of evolution and cosmogenesis," claims Boroson, "but looks at it all from another vantage point—that of consciousness. For example, the book shows the process of evolution but from God's perspective, as an enormous playing-with-possibilities." Indeed, what may be most distinctive about this new genre of books is that whether they seem aimed toward the scientific crowd or the devoutly spiritual, none of them precludes the possibility of being viewed through the lens of panentheism, which gives ample room to both spirit and nature and gladly accepts the reality of both.

Because of its potential to unite the traditional archenemies known as science and spirituality, it's likely that panentheism may turn out to be the reigning metaphysic of twenty-first-century thought—for children and adults alike. But no matter where the future ends up taking spirituality, it's nice to know that the kids of the third millennium are being looked out for by the more enlightened among us. And who can say where such early mystical studies might lead? Perhaps little Jenny, with her blanket and her flashlight, poring over the universe's latest autobiography in the stillness of the night, may one day become the leader of an interstellar civilization abiding perpetually in a state of cosmic consciousness.

Tom Huston

the incredible popularity of *the purpose-driven life*

From the battlefields of Afghanistan to the locker rooms of the NFL, author Rick Warren is captivating millions with his message of self-sacrifice

Ask anyone in the publishing world what's hot right now, and they'll say "religion." In fact, 2003 saw religious book publishing escalate so rapidly that it trumped the growth of the book industry as a whole by thirty percent. Spearheading some of this remarkable growth is a jovial, youthful-looking pastor from Orange County, California, by the name of Rick Warren, author of *The Purpose-Driven Life.* Lauded as a "groundbreaking manifesto on the meaning of life," Warren's book has swept the nation with its spiritual fervor.

Split into forty small chapters, *The Purpose-Driven Life* is "more than a book," Warren declares. "It is a guide to a *40-day spiritual journey* that will enable you to discover the answer to life's most important question: What on earth am I here for?" Readers sign a covenant to commit to reading the book every day, and they are encouraged to share the experience in a study group, or at least with one other person. Indeed, Warren places tremendous importance on human fellowship. "In real fellowship," he writes, "people experience authenticity. . . . It is genuine, heart-to-heart, sometimes gut-level, sharing."

Some critics of *The Purpose-Driven Life* claim that it is teaching Christianity "lite" or view it as self-help literature thinly veiled in theology. But even a casual perusal of the book shows that Warren's intention is to give his readers a dose of hard-core spiritual passion for a life fully committed to God. "It's not about you," the first line reads. "The purpose of your life is far greater than your own personal fulfillment, your peace of mind, or even your happiness. . . . If you want to know why you were placed on this planet, you must begin with God. You were born *by* his purpose and *for* his purpose."

> **"The purpose of your life is far greater than your own personal fulfillment."**
>
> **RICK WARREN**

There is a good deal of traditional Christian proselytizing in later chapters. "Your mission," Warren writes, "is the continuation of Jesus' mission on earth." Or, as he puts it later, "Now that you understand the purpose of life, it is your responsibility to carry the message to others." But *The Purpose-Driven Life* represents a radical break from what Lynn Garrett, religion editor at *Publishers Weekly*, calls "the old 'Health and Wealth Gospel.'" As she explains, "According to this view, if you're faithful and you pray and you're one of God's people, he will bless you financially and in every other way. That is not Rick Warren's message. His message is that happiness does not come from self-centeredness."

Indeed, Warren's creed of self-sacrifice for the sake of God and charity to others is uncompromising: "The heart of worship is surrender. . . . God wants your life—all of it. Ninety-five percent is not enough. . . . God is a lover and a liberator, and surrendering to him brings freedom, not bondage." Later he writes, "One thing worship costs us is our self-centeredness. You cannot exalt God and yourself at the same time."

In the United States, where material gain and individual self-improvement are the fuel most people run on, it seems that *The Purpose-Driven Life* should have been a flop. Instead, its definition of human purpose as "the wonderful privilege" of being a servant to God is captivating millions. But according to Garrett, this isn't all that surprising. "People are at a point now

where they're hungry for the kind of guidance this book offers. People want a way to transcend their old lifestyles in order to achieve a lifestyle that is truly altruistic." It's hard not to say "Amen" to that.

THE SPECIAL CAMO EDITION

In the past two years, 250,000 copies of *The Purpose-Driven Life* have been sent into the deserts of Iraq and the foxholes of Afghanistan, as well as to military installations around the world from South Korea to Germany. Specially designed to fit into army fatigue pockets, this military edition also has a camouflage cover. "We see these eighteen- or twenty-four-year-olds out there, and they have so many questions on their minds," Mark McDonald, president of the Purpose-Driven Life organization, told *WIE*. "These guys are watching their buddies get killed. But there are Biblical answers to issues of war in times of war, and we want to answer some of their questions: 'If I'm facing death or I'm around friends who are facing death, what does that mean? Who am I? What does it mean to die?'" Reportedly, many soldiers do the "40 Days of Purpose" studies with a spouse or a parent back home, communicating their insights from reading the book via email and telephone.

PURPOSEFUL FACTS

- Number of churches that participated in a live simulcast of the book's launch in 2002: 1,500
- Number of copies sold since then: 20,000,000
- Number of copies donated to the Pentagon in September 2003: 40,000
- Number of languages in which *The Purpose-Driven Life* is licensed for publishing: 58
- Weeks spent on the *New York Times* bestseller list: over 100
- Number of churches that have done "40 Days of Purpose" study groups: 20,000
- Number of denominations represented by those churches: 80
- Attendance at Rick Warren's Saddleback Church in Orange County, CA, each weekend: 20,000
- Total number of individuals on Saddleback Church's rolls: 80,000
- Government institutions that have conducted "40 Days of Purpose" study groups: U.S. Congress, U.S. Military Academy at West Point, and the U.S. Naval Academy
- Sports leagues that have held "40 Days of Purpose" study groups: National Football League (Oakland Raiders, New England Patriots), Major League Baseball (Boston Red Sox, Kansas City Royals), NASCAR, and the Professional Golfers' Association
- Number of automobile salesmen in North Dakota who give away a copy of the book with every car they sell: 1

Maura R. O'Connor

ONLINE EXTRAS: Meet the contemporary mystics and pioneers of Christianity **wie.org/christianity**

god goes to the movies

With the Spiritual Cinema Circle, a higher form of entertainment is in the mail

What does mind-body-spirit icon Deepak Chopra have in common with pop-metal poster boy Jon Bon Jovi? They both belong to the Spiritual Cinema Circle, a new DVD-of-the-month club with an Aquarian twist. Cofounded by veteran Hollywood producer Stephen Simon (*Bill & Ted's Excellent Adventure*, *What Dreams May Come*), this spiritual version of Netflix delivers between three and six films—features, documentaries, and shorts—to its members' mailboxes every month.

"Spiritual cinema is a genre that, up until recently, has not been recognized by Hollywood or mainstream media," Simon says. "[Yet] there are lots of us out here who want more movies with heart and soul, movies that ask 'Who are we?' and 'Why are we here?' but also allow *us* to provide our own individual answers to those eternal questions." To answer that need, the Spiritual Cinema Circle is presenting a host of lesser-known films that have been gleaned from the festival circuit or submitted by aspiring independent filmmakers. Think of it as a sort of New Age antidote to Mel Gibson's *Passion* and an open challenge to the sex-heavy, carnage-happy templates of Hollywood. Instead of stern religious dogmas, these movies convey personal spiritual messages; instead of violence and vulgarity, you get empathy and inspiration. "At the end of the day," hopes Simon, "we just want to make our audiences feel at least slightly better about being a human being."

Marketed toward sixty million Americans who consider themselves "spiritual but not religious," the Circle is part of a recent trend to infuse higher meaning into secular entertainment—a trend that picked up a serious head of steam in 2004 with the release of cult favorite *What the #$*! Do We Know!?* and the filming of James Redfield's *Celestine Prophecy: The Movie* (see *WIE* Nov-Feb 2004/05). Indeed, the sheer speed of the club's growth is compelling testament to our society's soaring hunger for spiritual content in popular media. Since its debut just over a year ago, the Circle has attracted almost eighteen thousand members from sixty countries around the world. Hundreds more are signing up every day. Over a hundred local "spiritual cinema communities" have formed in at least twelve countries and thirty states as venues for mystical movie lovers to watch these films together and share their passion for the genre. Some video stores have even started creating "spiritual cinema" sections in their aisles.

So what about the movies themselves? What are Deepak and Bon Jovi getting for their $21 a month? Ranging from five-minute animated shorts to full-length features, the Circle's smorgasbord of outside-the-mainstream fare hides some real gems, especially among the documentaries. *Farther Than the Eye Can See*, for example, follows climber Eric Weihenmayer on a bid to summit Mt. Everest, a daunting challenge for any mountaineer. But what makes his story incredible is that this particular mountaineer happens to be *blind*. More than a tale of physical endurance, it's an intimate glimpse into one man's inner struggle with, and triumph over, the experience of fear and the idea of limitation. Too often, however, the Circle's films lack the brave and unpretentious humanity that makes documentaries like *Farther Than the Eye Can See* so appealing. Frequently, they even seem like New Age equivalents of daytime soap operas. Their characters can tend to be less heroes than victims: men painfully estranged from their

fathers, husbands grieving over lost wives, women burned by love and lonely for affection, precocious children misunderstood by the world. They lament missed opportunities. They commiserate together. Eventually, they find some healing in therapeutic catharsis and/or glassy-eyed orbit around the perfect soul mate.

Mixed reviews aside, in an entertainment climate so often driven by the lowest common denominator of our basest impulses, the club's swift success is evidence that higher spiritual currents are beginning to stir in postmodern secular culture. Poised at the leading edge of a budding niche industry that they themselves are helping to define, they're proving that there's a market not only for films that explore spiritual values but for organizations that value community. With plans to start production on their own feature film in November (based on Simon's friend and fellow Oregonian Neale Donald Walsch's bestseller *Conversations with God*) and a new online master class in spiritual filmmaking being offered by Simon himself, the Circle continues to take risks and pioneer unconventional methods in order to bring more heart and soul to the moviegoing public.

Think of it as a sort of New Age antidote to Mel Gibson's *Passion* and an open challenge to the sex-heavy, carnage-happy templates of Hollywood.

Case in point: if you're a spiritual cinemaphile who doesn't just want to watch soul mates find each other on screen but are in the hunt yourself, what better place to look than the annual Spiritual Cinema Festival-at-Sea? We're sorry to report that it's too late to join this film-festival-meets-Caribbean-cruise on its maiden voyage—the MS *Zuiderdam* set sail from Ft. Lauderdale as *WIE* went to press—but there's always next year. Who knows? You might even catch a tan with Deepak by the pool or dance the night away with the partner of your dreams while Bon Jovi belts out "Livin' on a Prayer."

Ross Robertson

"our task is not complete"

A recent gathering of Nobel Peace laureates displays a potent blend of spirituality, morality, and politics

"Don't mix religion and politics!" I heard this injunction often in my formative years, a stern warning from elders that conversations mixing these two volatile elements of human life could easily, like a bad chemistry experiment, end up exploding in your face. For a political progressive, coming of age in a small town in the Bible Belt, it was good advice. But as I grew older, I found it more and more difficult to accept that statement at face value. After all, few things in life are more important than politics—it's the way in which we make our voices count in the governing of our ever-smaller world. And how can we govern effectively if we have divorced ourselves from one of the sources of our deepest values, namely the spiritual dimension of life?

Today, as the dynamic tension between spirituality and politics, church and state, the sacred and the secular grows ever more important and complex, the relationship between these two pillars of human culture seems up for question and reinterpretation as never before. That's why it was of particular interest to see spiritual, moral, and religious sentiments so prominently on display at the World Summit of Nobel Peace Laureates in Rome. The brainchild of Mikhail Gorbachev, this gathering has been held annually since 1999. And at last autumn's summit—from the opening day's "Man of Peace" award presentation to Yusuf Islam (better known as Cat Stevens) to the speeches of Mikhail Gorbachev and Lech Walesa—the language, tone, and overall tenor of much of the four-day conference resonated with a deep spiritual and moral conviction. But it was hardly at the expense of politics. Indeed, laureates such as Irish peace activist Betty Williams, former Costa Rican president Oscar Arias Sanchez, former South Korean president Kim Dae-Jung, and Guatemalan human rights activist Rigoberta Menchú Tum have risked their own lives for peace and a better world, and they are no strangers to geopolitical realities. Much of their time together was spent discussing the intransigent problems that afflict our twenty-first-century society—global terrorism, poverty, weapons of mass destruction, and environmental devastation.

The Nobel laureates are in a unique position to call the world's attention to critical issues and hold our collective feet to the fire.

The original intention of this annual star-studded summit was far-reaching: "to propose new guidelines to the

Few individuals on the planet carry greater moral authority than those who have been honored with the Nobel Peace Prize.

world for international policies that are more in line with the times" and to initiate "a general revision of international relations . . . based on the concept that national interest . . . must be completely reexamined within the framework of an increasingly complex and interconnected world." Five years later, Gorbachev's sense of the laureates' collective purpose has only grown more impassioned. As Betty Williams, 1976 Prize winner for her role in initiating Northern Ireland's Movement of the Peace People, remarked on the opening day: "I met President Gorbachev last night in the hotel lobby and I said to him, 'Mikhail, what do you want to come out of this summit?' And he said, 'I want to say, *enough is enough!* We must turn this around, the way our world is going.'"

However, good intentions are one thing; real change is something altogether different, a fact that the laureates know all too well from the challenges they have each faced in their own work. And throughout the week in Rome—from the featured panel on Terrorism and Other Threats to Humanity to the session on The Role of Ethical Economies in Overcoming Inequality and Division to the panel discussion on Multi-Ethnicity and Human Rights—there was a palpable sense of urgency that the high-minded ideals and deep discussions must translate into practical application. A formidable challenge in any circumstance, it is made even greater by the fact that the laureates have no formal institutional means to work with global governing bodies and no executive arm to carry out even the most well-intentioned ideas, policies, and programs. Yet they may have something much more important at their disposal: moral weight. Indeed, few individuals on the planet carry greater moral authority than those who have been honored with the Nobel Peace Prize. And as a nonaligned group, they are in a unique position to call the world's attention to critical issues and hold our collective feet to the fire. It is a responsibility that many of them seemed more than happy to uphold.

"To ignore horrible, horrible problems just because you can't begin to solve them is a kind of indifference that I think is a moral death," declared Paul Lacey, chairman of the Nobel Peace Prize–winning organization American Friends Service Committee and a practicing Quaker. "The greatest force for moral good is the imagination: that capacity to conceive of yourself in another person's situation, to feel what it would be like, and therefore to change the way you live your life."

Morals and ethics were front and center during the week, perhaps even more so than explicit references to religion and spirituality. Still, when practicing Catholic and 1983 laureate Lech Walesa exclaimed that "the more we advance technologically, the more we need values—values and ethics, that's the key," it was hard not to feel the weight of his religious convictions in the air. And the language of ethics hinted at a rarely seen potential—the possibility of spirituality, morality, and political activism merging into one passionate, wholehearted response to the many problems that beset our global society.

In a recent *New York Times* editorial, cultural critic Paul Berman powerfully articulated why this kind of response is so desperately needed and why our moment in history demands an inculcation of deep values into civic discourse:

> *It would be nice to think that, in the war against terror, our side, too, speaks of deep philosophical ideas . . . but [we] speak of what? . . . of United Nations resolutions, of unilateralism, of multilateralism, of weapons inspectors, of coercion and non-coercion. This is no answer to the terrorists. The terrorist speak insanely of deep things. The antiterrorists had better speak sanely of equally deep things.*

At the high points of the week in Rome, there was a sense that these celebrated activists may have a unique capacity to mobilize themselves in the service of a larger calling, to "speak

sanely of deep things" and actually be heard. And they have a natural sense of the importance of translating their own feelings about the state of the world into inspired, practical action. In a time when the spiritual and the political are so often separated and compartmentalized and where both often lack a larger unifying worldcentric view of the challenges we face as a species, it is hard to imagine a more critical task.

Each year, the summit ends with a collective statement prepared by the laureates, a document expressing their united thoughts on the state of the planet. But this time, Gorbachev and others were pushing for more. There are plans underway to develop a more permanent organization that would be focused on implementing the agenda and conclusions of the gathering, to try to move this unusual collection of global heroes toward a more practical orientation. As 1995 laureate Sir Joseph Rotblat so poignantly said, "We have a duty. We received the Nobel Prize for Peace. There is still not peace in the world. Until peace is achieved our task is not complete. It is our duty to see to it." Is it possible for this forum to evolve into a globally influential bastion of moral strength and radical activism? It's hard to know for sure, but judging by the quality of those four days in Rome, it would seem that some small part of that task, at least, has already begun.

Carter Phipps

THE FRAMEWORK OF HUMAN UNITY

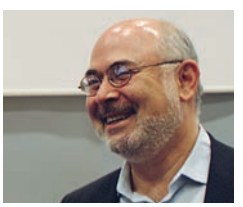
with Jonathan Granoff

"Nobel Peace laureates have a right, an ability, and a responsibility to articulate a morally empowered vision for all people on the planet. Most leaders, when they say 'we,' are referring to their own nation, race, religion, or community. But when Nobel Peace laureates say 'we,' they mean the entire human community. Articulating that framework of human unity is the first step that needs to be taken to address the crises facing our world. The oceans, the rainforests, and the global biological, biophysical commons that sustain civilization are threatened because of the provincialism of selfish business and national interests running unrestrained by law and morality. These selfish tears in the fabric of equanimity and justice threaten our very survival. But before we can even devise practical programs to address the problems we face, we first have to *re-cognize* our common humanity. The Nobel laureates are able to help us do that.

"We must reach for a common source of values. That is the new awakening. It is an awakening that can be perceived in many dimensions—political, philosophical, artistic. It all depends on how you look at the gem. But at its source, this gem of awakening shines with a light that exists as the center of every human heart. This light is nothing new, and yet each time a human being reenters the center of the heart, the possibility of grace entering into the world is refreshed.

"This world is so integrated today. Our collective global challenges are now impacting people's personal lives at a local level. An interest expressed on the trading floor of the futures market in Chicago can affect agricultural village life in a town in Chad. In so many ways, in the space of a few days, a business decision by a few people rationally acting solely for themselves can either bless people far away with jobs and services or perhaps curse the environment in which others live day to day.

"The Nobel Peace laureates seem to have a real recognition of this interconnectedness, and they are energized by that insight. I've just spent several days with them, and I can tell you, it's hardly work. It's a huge privilege. And the most important thing that I've gained by being with them is the awareness of this interconnectedness—the awareness of being on the same tree of life with everybody else."



Jonathan Granoff represented the International Peace Bureau at the 2004 World Summit of Nobel Peace Laureates in Rome. He is president of the Global Security Institute, co-chair of the American Bar Association's Committee on Arms Control and National Security, and vice president of the NGO Committee on Disarmament at the UN. A student of the late Sri Lankan Sufi master Bawa Muhaiyaddeen, he lectures worldwide, emphasizing the legal, ethical, and spiritual dimensions of human development and security.

Listen to the interview with Jonathan Granoff on *WIE Unbound* **wieunbound.org/granoff**

pulse

catching the buzz from global leaders, thinkers, teachers, and mystics

by Carter Phipps

blogging for nirvana

These days, spiritual folks are just beginning to embrace the latest craze to hit the internet—blogs (short for weblogs). These oh-so-personal and popular online journals are the newest way to share one's thoughts, ideas, and spiritual experiences with a few, or a few million, of one's friends. Blogs like *Christdot* (news for Jesus freaks), *Veiled for Allah* (the occasional thoughts of a Muslim woman), and *Paperfrog* (Buddhist news) are at the forefront of the movement, but the "spiritual but not religious" types are getting in on the action as well. There is *Facing Inward* (motherhood, marriage, and yoga) and *White Light* (all things spiritual from Advaita to Zen). And recently, author and popular American Buddhist teacher **Lama Surya Das** fired up his own online e-diary. So what revelations does it offer about America's favorite lama? Well, such things as his presidential preference (hint: it's the guy who lost) and his reflections on water ("Water flows," he writes. "It reminds me to allow things to proceed naturally, spontaneously, unhindered"). Another one to check out is *Kundalini Splendor*, a blog started by **Dorothy Walters**, author of *Unmasking the Rose*. Given the site as a "birthday present," Walters was hesitant at first, but soon this seventy-seven-year-old mystic got in touch with her inner blogger and now describes the forum as her "letter to the world." She uses it to chronicle her ongoing experiences and thoughts about a Kundalini awakening that transformed her life two decades ago. Like many blogs, its entries range from the mundane ("Today, because it was a bit cold, I decided to do my chi gong stretching in the kitchen, rather than in my usual place") to the sublime ("We are being filled with light we do not comprehend, lifted toward essence, assaulted by nameless love, at this juncture of the finalities").

So to all those frustrated writers out there recording their spiritual lives in the obscurity of a pen-and-paper universe, welcome to the self-publishing event of the millennium. Gutenberg himself would be impressed. But just remember, on the untamed frontiers of the internet, the only rule is BYOD (Bring Your Own Discrimination) . . .

the passion of the planets

Include philosopher **Richard Tarnas** among those who are taking a serious scholarly look at where we as a civilization are headed in the next years and decades. The highly successful author, who hit the ball out of the park with his widely praised 1991 offering, *The Passion of the Western Mind,* is planning a follow-up over a decade later. The new work will be called "Cosmos and Psyche: Intimations of a New World View." It will take up where *Passion* left off, at the conclusion of our postmodern cultural moment, and it will explore the elements of what he feels is an emerging worldview that will play a major role in shaping the twenty-first century. Not much is yet known about the exact nature of Tarnas' analysis, and the book won't hit stores until November of this year, but a few readers who have seen early drafts are giving it high marks. They are saying that among other things, it will revolutionize our understanding of astrology. Astrology? Yes, believe it or not, Tarnas plans to apply his enormous analytic and descriptive talents to giving an updated, cosmologically informed view of this ancient science. So now that you've had a few years to digest the passion of Socrates, Descartes, Kant, and Nietzsche, Tarnas is ready to keep pushing the edge and resume his role as philosophical tour guide through the pathways of history. But this time the future, as well as the past, is on the itinerary . . .

tracking the pioneers of human potential

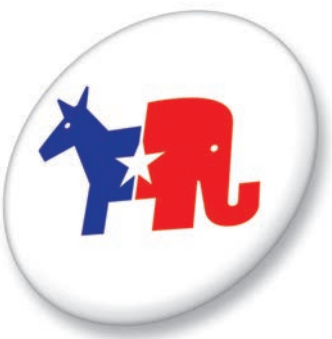
For almost four decades, **Michael Murphy** and **George Leonard** have been working hard to make sure the human potential movement that they helped initiate continues to thrive. *Pulse* caught up with Leonard recently to hear the latest from the integral world's most active senior citizen. Today, he is busy turning Integral Transformative Practice (ITP), a spiritual practice integrating "body, heart, mind, and soul" that he and Murphy founded, into a nonprofit foundation. Apparently, he was recently the grateful recipient of a quarter-million-dollar grant to help ITP evolve and grow. Leonard himself is a perfect example of the new foundation's ideal—blending different practices and philosophies to create a more integral, and more interesting, approach to personal development. These days he is dictating his memoirs to the University of Santa Barbara Library, playing jazz piano, and still appreciating the art of aikido at the age of eighty-one ("I specialize in throwing people," he explains). And in his spare time, he works on the board of the Esalen Institute. Murphy is hardly slowing down either. In addition to his many duties running Esalen's pioneering Center for Theory and Research, he was recently seen discussing the spiritual joys of golf on a promotional Hollywood DVD designed to raise money for turning his thirty-year-old bestseller, *Golf in the Kingdom*, into a movie. "I never would have guessed how many people on golf courses have these [spiritual] experiences," he

> **"I've been taking confession from golfers for thirty-three years."**

remarks on the DVD, "and I've been taking confession from golfers for thirty-three years." Producer **Mindy Affrime** and director **Susan Streitfeld** are looking for the funding to do big-screen justice to the much-loved story. So if you happen to know a golfer with a yen for the transcendent who can spare, oh, maybe four or five million dollars, thousands of spiritually starved movie fans are counting on you for their next dose of silver-screen entertainment . . .

politics gets inclusive

Have the red state/blue state wars got you down? Do you still find yourself ruminating endlessly on the outcome of the election? Wondering why *Desperate Housewives* is most popular in states that voted according to "moral values"? Perhaps a visit to Radicalmiddle.org would help combat the election blues. Named after the book and newsletter of the same title, the site is author **Mark Satin**'s attempt to lift politics to a higher level of discourse. His concise commentary, mixed with several parts idealism, a good dose of realism, a touch of spirituality, and always heaps of common sense, is a welcome tonic in today's polarized political climate. No matter what the subject, Satin refuses to be pinned down by left and right



stereotypes. "If the New Left slogan during the '60s was 'Dare to struggle, dare to win,'" he writes, "the Radical Middle slogan during the '00s might as well be 'Dare to synthesize, dare to take it all in.'"

Once a member of the sixties radical militant group Weather Underground, Satin evolved into a passionate activist in the seventies, a sensitive New Age political writer in the eighties, and now has landed in his current incarnation as an integral thinker bridging the deep divides of a new millennium. The whole journey will be chronicled in his upcoming book, tentatively titled "Saving the World: A Cautionary Tale." And speaking of transcending and including partisan politics, **Ken Wilber**, the man who invented the phrase "transcend and include," also has a new book arriving soon. This one delves into the political dynamics of our current concerns over terrorism. Called *The Many Faces of Terrorism*, it will bring the genius of integral philosophy to bear on the war on terror. Though Wilber already counts such prominent politicos as **Al Gore** and **Bill Clinton** among his fans, somehow it seems that Wolfowitz and Rumsfeld might make for a tougher sell . . .

the spirit of recovery

When walls of water came crashing into peaceful Asian shorelines last December, the devastation was indiscriminate. Houses, businesses, tourists, locals, men, women, and children were all affected by the raging tsunami, and temples, mosques, and ashrams didn't fare any better against the overwhelming flood. In the aftermath, people from all walks of life have pitched in to help clean up, recover, and rebuild. Here are two examples of spiritual communities that have been doing their part to help millions recover from the awesome and humbling display of nature's power.

The tsunami spills over the sea walls, as seen from the roof of Amritapuri Ashram, home of Mata Amritanandamayi.

Spiritual teacher Mata Amritanandamayi (Amma) has been a hurricane of compassion since the tsunami first washed over the sea walls of her ashram in Kerala, India, last December. She has pledged 23 million dollars for relief and reconstruction in both India and Sri Lanka, and provided immeasurable emotional and spiritual support to those devastated by the disaster.

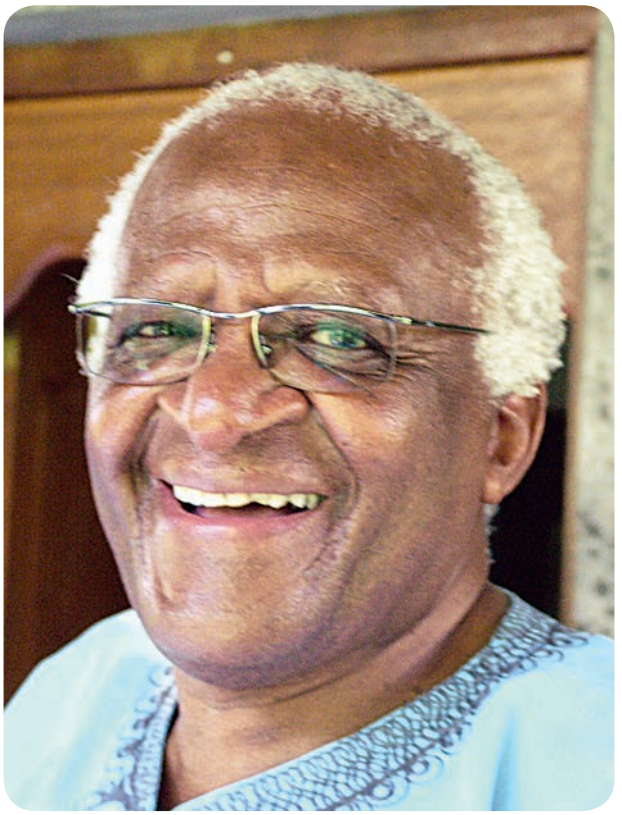
Auroville, an experimental village, or "universal township," in southern India inspired by the work of Sri Aurobindo and the Mother, was far enough away from the coast to escape the brunt of the tsunami. But in response to the influx of fleeing villagers from the coastal areas, local residents have set up emergency relief camps to care for refugees and to help clean up and rebuild local communities.

tsunami relief:

www.amma.org and click on *Tsunami Relief Donations*
www.auroville.org and click on *How can you help?* under *Auroville tsunami work*

{pulpit}

featuring the passions and perspectives of contemporary spiritual leaders



When God Smiles

Archbishop Desmond Tutu considers the human predicament from God's point of view

interview by Jessica Roemischer

WHAT IS ENLIGHTENMENT: *In your acceptance address to the Nobel Prize Committee in 1984, you began by speaking about the "deepening crisis in South Africa"—the discrimination, evictions, brutality, and daily murder faced by blacks in your country—which you called "apartheid's 'final solution.'" As a religious leader in that time of widespread violence, how were you able to sustain your people's faith in the possibility of freedom and justice?*

ARCHBISHOP DESMOND TUTU: You probably need a modicum of suffering to help you realize what it means to belong to the Church. I'm not certain that Christianity flourishes properly where people are comfortable. It *is* a faith ultimately for sufferers. For example, the story of the fiery furnace in Daniel, Chapter 3, is a nice story. But for people who are having a rough time, it's more than that. You preach to them, "Now look, this injustice and oppression are like being thrown into the fiery furnace. The king threw three guys into the furnace and then went to find out what had happened to them. And he counted, 'One, two, three . . . and there was a fourth!'" We used to say to our people, "God is not over there; God is *here*. The God we worship is not a God who gives you good advice from a safe distance. God knows your suffering, and God is in this fiery furnace with us." So a lot of the Scripture came alive at that time. God said to Moses, "I have heard. I have seen. I know. I will come down." And I would say, "Don't think that our God is deaf. God has heard our cry in this awful country. God is not blind. God knows what's happening to us, and just as it occurred then, God will come down and one day lead us out of this bondage."

WIE: *I was very moved by an invocation you recently gave in which you prayed, "God, help us wipe the tears from your eyes." In a world that continues to be filled with so much anguish and conflict, we often pray to God to help us ease our suffering. Yet you were asking God to help us ease* His. *How do we "wipe the tears from God's eyes"?*

DESMOND TUTU: The images that we have of God are odd because God—this omnipotent one—is actually weak. As a parent I understand this. You watch your child going wrong and there's not very much you can do to stop them. You have tried to teach them what is right, but now it is their life and they are mucking it up. There are many moments when you cry for your child, and that's exactly what happens with God. All of us are God's children.

I frequently say, I'm so glad I'm not God! Can you imagine having to say, "Bin Laden is my child. Saddam Hussein is my child. George Bush is my child." Oh! *All* of them, including me. Can you imagine what God must have felt watching the Holocaust? Watching

Hiroshima and Nagasaki? Watching Rwanda? Can you imagine God watching Darfur? Imagine God watching Iraq and saying, "These are my children here, and they are killing my other children. And I can't do anything because I have said to them, 'I give you the space to be you and that space enables you to make choices. And I can't stop you when you make the wrong choices. All I can do is sit here and cry.'" And God cries until God sees beautiful people who care, even if they may not do earth-shattering things.

There is a fantastic story of a so-called colored woman who was driven from her home and ostracized by her family because she had HIV/AIDS. She came to live in a home for people who suffered from the disease, and there were white men there who would help her because she couldn't do anything

There are many moments when you cry for your child, and that's exactly what happens with God. And all of us are God's children.

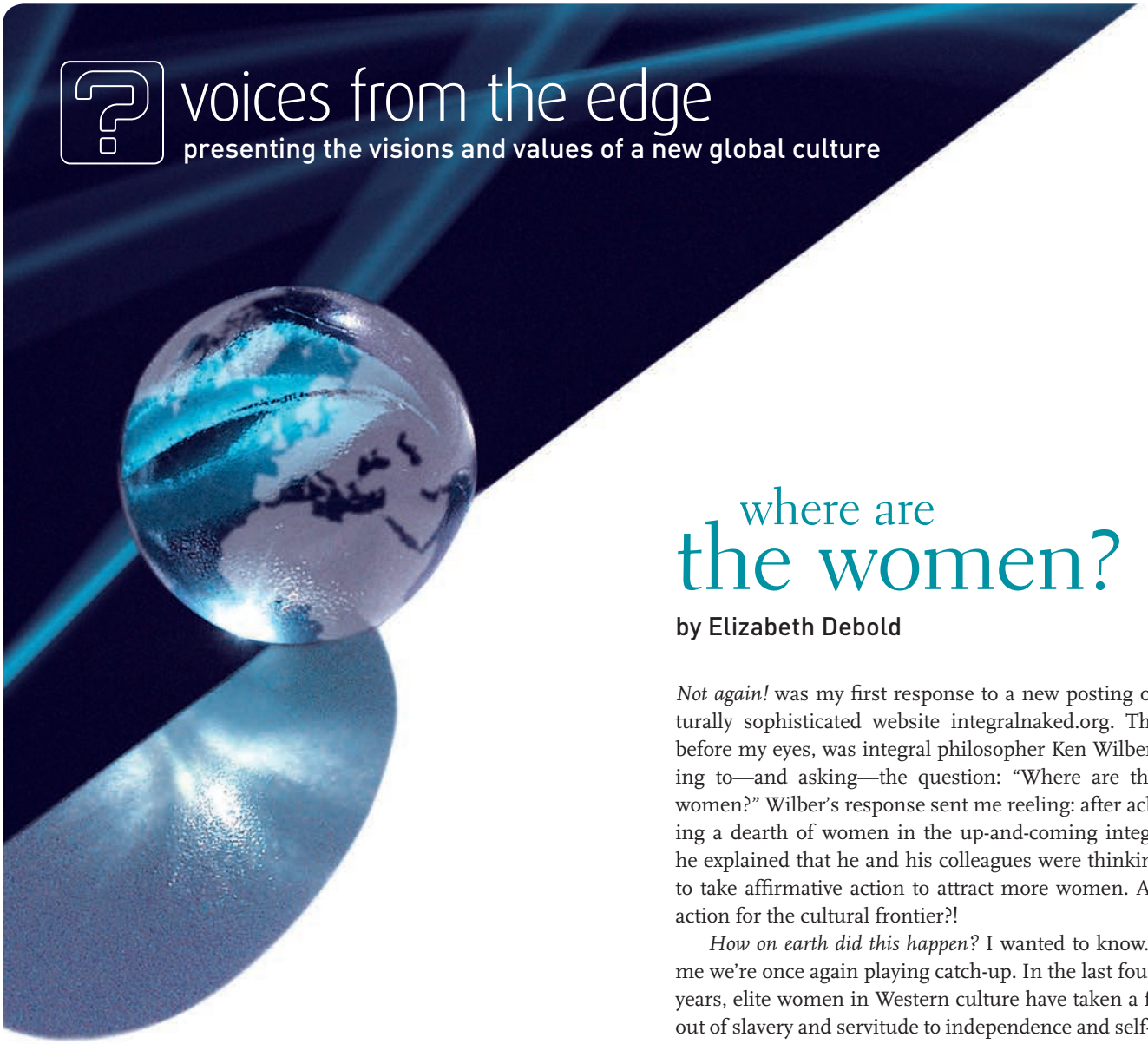
herself. She was all skin and bones. They would carry her like a baby and wash her, bathe her, feed her. Then they would put her in front of a television set and hold her. And this was during the apartheid years. I visited this home and said, "What an incredible lesson in loving and compassion and caring." It was transfiguring something ugly, letting something beautiful come from a death-making disease. When God sees that, a smile breaks forth on God's face and God smiles through the tears. It's like when the sun shines through the rain. The world may never know about these little transfigurations, but these little acts of love are *potent*. They are moving our universe so that it will become the kind of place God wants it to be. And so, yes, you wipe the tears from God's eyes. And God smiles. ■

Archbishop Tutu was interviewed at the Quest for Global Healing Conference in Bali, December 2004.

ONLINE EXTRAS: Watch the entire interview with Archbishop Tutu on *WIE Unbound* **wieunbound.org/tutu**

voices from the edge

presenting the visions and values of a new global culture



where are the women?

by Elizabeth Debold

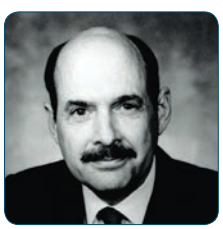
Not again! was my first response to a new posting on the culturally sophisticated website integralnaked.org. There, right before my eyes, was integral philosopher Ken Wilber responding to—and asking—the question: "Where are the integral women?" Wilber's response sent me reeling: after acknowledging a dearth of women in the up-and-coming integral scene, he explained that he and his colleagues were thinking of ways to take affirmative action to attract more women. Affirmative action for the cultural frontier?!

How on earth did this happen? I wanted to know. Don't tell me we're once again playing catch-up. In the last four hundred years, elite women in Western culture have taken a flying leap out of slavery and servitude to independence and self-assertion. So this is a disturbing turn of events—and somewhat confusing. Haven't women been *leading* a cultural revolution? Yes, it's true. But while we've been working toward building a society in partnership with men, we seem to have missed the start of something that may well be the next revolution. New ways of thinking are arising to meet the chaos and conflict of our globalizing world, sometimes called "integral" à la Wilber and others, or "second tier" by those in the know about Spiral Dynamics, or "big history," or simply "post-postmodernism." And with very few exceptions, the leading proponents of these new views have one noticeable characteristic in common: they are all men. So the question certainly is: Where are we women? And where do we go from here?

A scant forty years ago, women were making history, pushing the leading edge of Western culture from the modern era into the postmodern. The rapidly rising tide of a new consciousness swept through the young women of the New Left, lifting the most courageous out of the "sea of misogyny" that characterized even the most progressive politics, opening

Voices from the Edge features:

Elizabeth Debold
Where Are the Women?



John Petersen
Discovering Fire:
The Coming Revolution
in Energy

their eyes and hearts to the radical possibility of true equality between women and men. Small groups of women, fresh from the civil rights movement, angered by Vietnam, and ridiculed for their passionate intelligence, began to speak with each other about what had theretofore been unnoticed and unspeakable. Something went "click"—as they described it—and a feminist consciousness sparked into life. The social and legal structures that kept hierarchies of dominance and privilege in place suddenly became visible. In pockets across the United States and Europe, women gathered, six, twelve, a couple dozen at a time. A phone call from one woman to a friend in another city would ignite the flame. "News that women were organizing spread . . . like a chain reaction," says political scientist Jo Freeman. The span of two or three years saw the creation of the National Organization for Women, Redstockings, New York Radical Women, Seattle Radical Women, Cell 16, the Chicago Women's Liberation Union, Bread and Roses, WITCH (Women's International Terrorist Conspiracy from Hell), and the Female Liberation Front, to name just a few.

Courting outrage, these radical women broke boundaries, taboos, laws, and habits at every turn. Women's minds burst out of the corseted confines of traditional femininity. "The joy of feminism, for those who felt it, often had spiritual proportions," write Rachel Blau DuPlessis and Ann Snitow in their introduction to *The Feminist Memoir Project*. "Like a conversion experience—'the scales dropped from my eyes; I saw all things new.' One's inabilities and blockages, resentments, hidden griefs, all the paraphernalia and picturesque qualities of 'girlhood' and 'womanhood' suddenly were ripped open, suddenly fell apart. And 'all things'—from the most mundane and habitual to the most enormous—seemed changed." In just one afternoon of street protest in 1967, women overturned the long-standing policy of the *New York Times* to segregate "help wanted" ads by sex, with most major city dailies following shortly thereafter. Like a tidal wave, this new consciousness lifted the institutions of Western culture—marriage, family, work—and dropped them, teetering, on a higher ground.

Fast-forward to the present: the once-outrageous notion that women and men are, or should be, social, economic, and political equals has become the accepted view of the majority, even in the increasingly reactionary U.S. This is an enormous sea change. A 2003 *Ms. Magazine* poll showed that seventy-five percent of women and seventy-six percent of men surveyed felt that "feminists and the women's movement have been helpful to them"; eighty percent of those surveyed saw the women's movement as "the moving force behind" such positive social changes as "women's greater job opportunities, higher education levels, changes in the workplace that allow combining jobs with families, and better pay." And yet, after such stunningly rapid change, the final goal of true equity and partnership evades us. On the most basic indicator of economic equality—

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median wages—women earn seventy-five cents for each dollar that a man with the same experience earns for the same work. Women are still rarely seen in the highest echelons of power in business or politics. And most married working women with children will tell you that they're not only bringing home the bacon—they're frying it, serving it, and then cleaning up.

The traditional feminist arguments about the source of these differences between women's and men's lives are wearing thin. To continue to blame structural biases and inequities doesn't seem to be enough. There's something deeper at work. In fact, if we listen to teenage girls' expectations and aspirations for their lives, we can hear just how deep these differences run. Girls give us a view of life from the upcoming generation, shaped by what has gone before, desirous of more, and unfettered by the practical realities that limit a life. In a 2002 survey of teens by The Committee of 200 and Simmons College School of Management, there is significant parity in girls' and boys' desire for enjoyable and interesting work, respect, and a "balanced life." Only three percent of girls and two percent of boys don't think that they will need to support themselves financially. But there are critical differences. Girls place a higher priority than boys on work that involves "helping others and making the world a better place." And even though

girls and boys in high school "are equally likely to be leaders of their clubs and teams" and "rate themselves similarly on leadership skills," girls "are less likely than boys to aspire to leadership positions in their future careers." Thus, the study showed that while a majority of girls want to change the world, they don't want to take responsibility to lead or to have authority over others in order to do so. When the question of hierarchy enters into the domain of relationship, girls—and, I submit, their mothers and older sisters—balk.

This raises a serious question: Are the differences in men's and women's relationship to hierarchical power hard-wired into us? It's increasingly popular to assume so. And it may well be true. But before we use this evidence to drop the project of achieving a radical and liberated equality between women and men, I want to slow down. There is something that came alive at the birth of the movement for women's liberation in the sixties that points to a potential so powerful that it calls into question everything that we think we know about the female gender. In the forward momentum of that fresh wave of radical feminist consciousness, women were the vehicles for an almost irresistible impulse to reach higher, to break free, to rise up. "It came at us full tide and from all sides and swept our lives into action, sudden meaning, a transforming vitality, a consuming energy that is still unspent," Kate Millett recalls. The light of this new consciousness shone on everything in women's lives, from shaving one's legs to the institution of marriage to the workings of industries (including pornography, women's magazines, and fashion) that trained women to walk the narrow path of femininity in high heels. Women were lifted into leadership despite themselves. "To give expressive leadership is exhilarating, draining, and terrifying," explains Meredith Tax, cofounder of Bread and Roses. "It is not just self-expression; it is letting the spirit speak through you. At certain historical moments when change is possible, collective energy fills the air like static electricity, shooting out sparks."

These women celebrated sisterhood. "To be a feminist in the early seventies—bliss was it in that dawn to be alive," writes Vivian Gornick. "Not an I-love-you in the world could touch it. There was no other place to be, except with each other." Ignoring their gender's long history of competition and the very real differences between them, for a glorious evolutionary moment these outrageous and outraged pioneers created an ideal of women-as-sisters, giving them ground beneath their feet as they attempted to leap beyond the safety of homebound relationships into something unknown. The ideal of women united in shared struggle kept them together as they undertook the deliberate act of changing women's consciousness. In small

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groups, they engaged in an experiment in evolution called "consciousness raising," or CR. Reaching to see every aspect of their personal experience as the product of a social, political, and economic system that had primarily benefited men, they coined the slogan "the personal is political." This profoundly *im*personal perspective on their personal fears, dreams, and desires created a seismic shift in the consciousness of woman—releasing a rage for change. "We expressed individual rage, but on behalf of a more communal political and economic radicalism than is imaginable now," says Rosalyn Fraad Baxandall, of New York Radical Women and Redstockings. "The aim was to challenge the systems through which the classifications of 'masculine' and 'feminine' are constructed and maintained. . . . We downplayed the role of the individual. We never dreamed sexism could be solved by changing one man or one woman."

Yet this updraft of spirit, this collective move toward liberating the consciousness of woman, didn't last. So much was happening at once that it is hard to pinpoint an exact cause. One factor surely had to do with the vociferousness of men's response. To the women's utter surprise and shock, their demand for "personhood and dignity" was met by "violence and hatred" from their husbands, lovers, colleagues, and peers, "men who," as Dana Densmore recounts, "until then appeared normal." Densmore, one of the founders of an early feminist journal called *No More Fun & Games,* says, "We felt we were girding for an apocalypse in male-female relations." For some, this threat proved to be too much. Another factor had to do with women themselves. The promise of sisterhood proved to be elusive. Black women wanted to fight for racial equality beside their brothers—not for gender equality beside white women with whom they shared no

positive history and whom they had little reason to trust. Radical lesbians charged that true liberation meant freedom from heterosexuality. Differences along the lines of race, class, and sexuality began to rip the movement apart. And something more sinister began to happen. Conflicts erupted that rarely came to any positive resolution. Groups splintered, often shunning each other. And those women who were seen as leaders—the highest-achieving, most competent, and most outspoken—were "trashed" and purged from the movement. "Sisterhood is powerful," Ti-Grace Atkinson is credited with saying. "It kills sisters." The movement ate its leaders. In eliminating those women who were pushing the edge, the upward surge of woman rising slowed almost to a halt. This dark unsisterhood has little to do with helping or caring for others—at least not other women. Differences are tolerated as long as they make no difference—in other words, as long as they do not reveal differences in power, ability, or status. And power operates covertly: unacknowledged rather than unused.

Every woman who has lived through seventh grade has in some way experienced these frightening dynamics that enforce a profound and perhaps even pre-rational conformity between women. Stay within the bounds and you can find care, connection, and mutuality. Push beyond and . . . well, watch your back.

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According to the teen girls with whom I work, this inclusion-exclusion drama that we first played out in girlhood hasn't really changed. No wonder. The roots of this behavior go further back than seventh grade or the sixties. Research on female primates suggests that many of our evolutionary foresisters spend their time grooming others to avoid being picked on and holding grudges against each other that make reconciliation impossible, all to gain an advantage in sexual reproduction.

The evidence seems to be mounting to support the view that women are deeply driven not to lead—so much so that we will stop other women from leading. It seems, in fact, to be not simply an individual preference but a collective one that dates back to the origins of the human species. But I would argue that we can learn something from what happened in the women's movement that could be even more powerful than the momentum of a million years of competition between women to secure a mate. The women's liberation movement had an effect so far beyond those relatively few heroic women who were directly involved. Why? Because they were working to *change consciousness itself*. Women, compelled to change themselves and the world, decided to evolve consciously for the sake of freedom and equality. And something was liberated that transformed almost every aspect of social life. Yes, we have settled back in, created a new status quo that falls short of full equality and partnership between the sexes. However, it was an extraordinary first step: an attempt to create systemic change at a scale that had never happened before—led by women. We faltered in leaping further because the ideology of the time said that all differences between the sexes came from cultural conditioning, which could be changed. But in fact, there was something more fundamental, more primitive, operating in us at an instinctual level. A deeply rooted, biologically driven impulse to compete against each other not only destroyed the movement's leadership, but it sabotaged sisterhood—and any hope for further collective transformation.

Radical sisterhood was necessary to create a collective change in consciousness. The next step for women's liberation would have been to explore those primitive dynamics of competition and betrayal *together*. But at the time, this must have been unthinkable. Women were already risking so much, in terms of their relationships with men and all that had given them any kind of security in the world. This radical bid for both autonomy and equality "couldn't last," notes Wendy Kaminer in her incisive 1993 *Atlantic Monthly* essay "Feminism's Identity Crisis." Why? "It was profoundly disruptive for women as well as men. By questioning long-cherished notions about sex, it posed unsettling questions about selfhood. It challenged men and women to shape their own identities without resort to stereotypes. It posed particular existential challenges to women who were accustomed to knowing themselves through the web of familial relations." Questioning the most fundamental conditioning in ourselves, without the ground of real sisterhood, was too overwhelming. We pulled back. And the wave of transformation that women had unleashed began to lap more and more gently at the shores of the status quo.

The slogan "the personal is political" lost its edge. A new "feminine feminism" became popular, one that celebrated rather than challenged our traditional caretaking roles. By placing the greatest value on our capacity to care, the entire

momentum of the movement shifted inward—focusing on women's personal qualities rather than on the sociopolitical mechanisms that imprisoned our minds and spirits. No longer meeting others in the positive intent to raise consciousness, each woman was left on her own to deal with the victimizing forces of oppression and limitation. This feminine feminism created another kind of sisterhood; one not born of shared struggle but rooted in the age-old collusive bond between women—our sense of emotional and moral superiority to men. In this collusive sisterhood, heterosexual women's primary identity involves caring for men and children, and our relationships with other women are too often used to let off steam or kvetch. This sisterhood is two-faced: smiling as the good girl who is selfless and caring when she gets what she wants, but underneath simmering with rage as the angry victim when she doesn't. No longer calling women to rise up in rebellion, this new feminine feminism invited women to lie down—on the therapist's couch. The vertical movement of a new consciousness became dispersed in the self-reflective world of the postmodern self.

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Feminism opened the door to untold choices for women, and for men. This was the postmodern revolution: a fracturing of the universal into the particular, the dissolution of Truth into truths, the breaking down of absolutes into relatives, and the one-way-to-be-a-woman into the many. In today's "whatever" world of instant celebrity and a dizzying array of consumer goods catering to every desire, young women find themselves in a free-for-all that is touted as freedom. And this has given rise to the latest incarnation of feminism. "Personal choice seems to be the only [feminist] value," writes *Nation* columnist Katha Pollitt. "There are no politics, and no society." This generation has adopted the key takeaways from the emerging field of evo-

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lutionary psychology: women manipulate to get power and seek status through powerful men. Armed with the last decade's research and six years of *Sex and the City*, young *feministas* have turned their backs on the good-girl victim to adopt her mirror image: the bad-girl temptress. Sexuality is the coin of the realm for the self-proclaimed "girlie feminists" of Gen X and Gen Y. However, the embrace of sexuality as a source of individual power is ironically just as traditional and limited a landscape for a woman's life as that of the good and caring woman. Both good-girl and bad-girlie feminism are related to our ancestral past, our primate desires to reproduce. Thus, neither liberates us from the deepest part of our conditioning so that we can find new ways of being powerful in the world.

So thank you, Ken Wilber, for raising the question: Where are the women? The female half of the leading edge cannot opt out of the further shift in consciousness that is so desperately needed to meet the crises of our globalizing world. Too many of us progressive women have been seduced by the endless stimulation of the contemporary social scene, held captive by our own primitive desires for sex or safety, and are still fearfully avoidant of the deadly competition that blocks us from being a collective force for change. It's a truism that those who have benefited most from an evolutionary advance are most reluctant to move forward because it requires moving beyond what has been to their advantage. Women benefited immeasurably from this last shift in consciousness. And now we are stuck in the postmodern status quo—too nice or too infatuated with our own desires and feelings to reach beyond it. We don't want to reckon with the fact that, on this planet, the gift of choice is not a narcissistic entitlement to pleasure but a responsibility through which we meet the increasingly high stakes of being human.

Let me ask the question anew: Where *are* the women who want to evolve consciousness? Who want to find out what it means to be *women,* not good girls or bad girlies? Who will take the hard-won lessons of feminism's last forty years and consciously choose to evolve, to once again risk placing our hearts in each other's hands and dare to lead? Where are those who will grapple with our primitive drive to compete with each other so that we can realize a higher collective potential? This is what faces us, as women and as human beings. It's a choice that each of us has to reckon with. Only then can we create the new world that has always been the promise of women's liberation. ■

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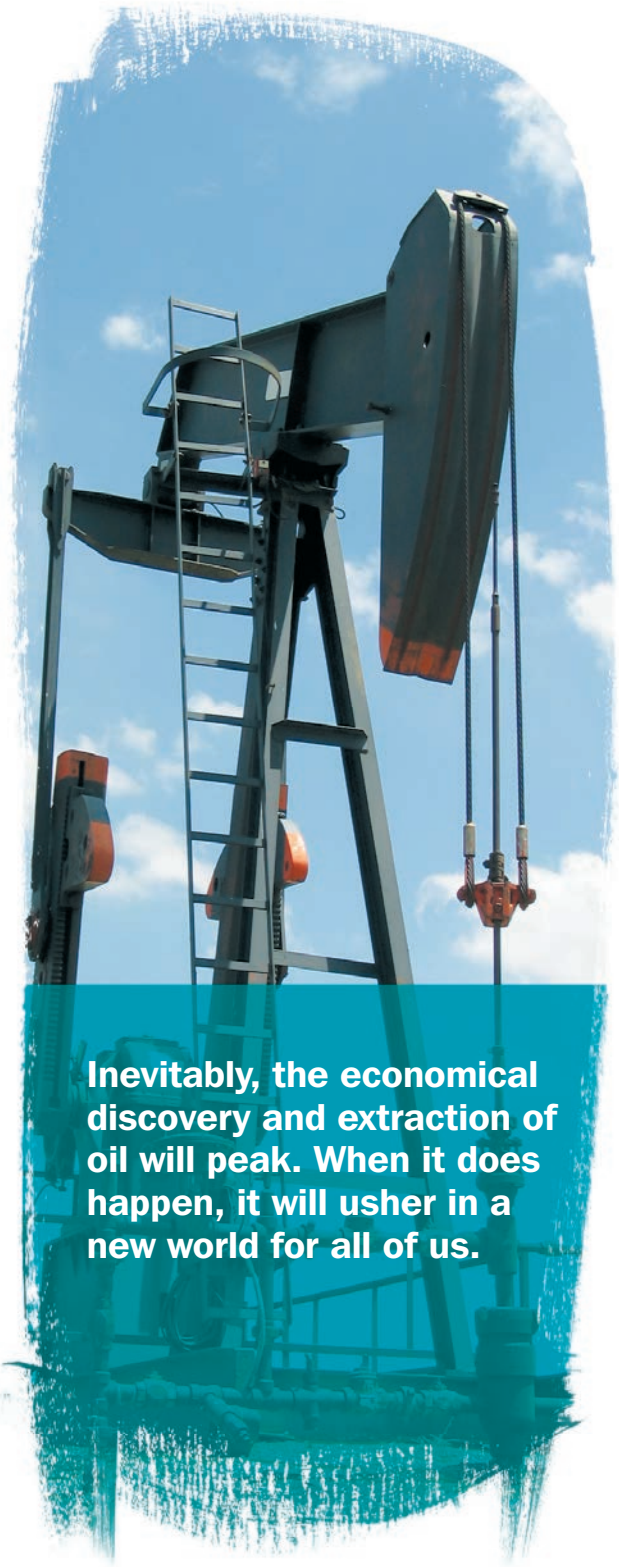
ONLINE EXTRAS: For more on the work of Dr. Elizabeth Debold, visit **wie.org/bios/debold**

discovering fire:
the coming revolution in energy

an interview with futurist John Petersen
by Carter Phipps



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WHAT IS ENLIGHTENMENT: *There is a lot of talk in the news these days about "peak oil"—the idea that we will soon hit or may already be hitting the worldwide limit of our oil production capacity. This milestone has numerous and far-reaching implications for the future of life on the planet. Do you think that we're reaching peak oil? And if so, what can we do about it in terms of shifting our energy use over the next decades?*

JOHN PETERSEN: Inevitably the economical discovery and extraction of oil will peak. The only question is when. Some people think it's happened already; some people think it will happen thirty years from now, but we do know, at least, that it won't be as long as a hundred years from now. When the peak does happen, it will begin to usher in a new world for all of us that could evolve in a number of directions; perhaps a couple of them could exist in parallel.

I believe we're moving toward an all-electric world, where everything—transportation, heating, communications, etcetera—is run on electricity. The only question then becomes: How do you produce the electricity? Right now, we are on the verge of a revolution in solid-state chips, heating and cooling chips. If you want to produce cool air, you blow air across some highly efficient, electronic cool devices, and to produce heat all you do is to reverse the polarity of the electricity going through these devices. In laboratories, these devices are far more efficient in heating and cooling than the current mechanical systems with compressors and pumps, and they are many times more efficient than the present solid-state devices that are used for cooling. It's a technology that has ramifications for managing the climate in buildings, vehicles, and many other devices. Soon we'll be in a situation with no pumps and no belts—we'll have fans and that's about it.

Zero-point energy is the energy that exists at the most fundamental level everywhere in the universe. Some very thoughtful people would argue that this energy is what God is.

So first, in terms of space heating and cooling, we're on our way to an electric world. And second, in terms of large-scale transportation, almost everything is electric now. The United States Navy has said that all of their future ships will be electric. They'll produce the electricity with jet engines driving generators. The same is the case for modern railroad locomotives, of course.

WIE: *But that still uses oil.*

PETERSEN: Yes, they use jet and diesel fuels. But in time you can potentially swap to different kinds of fuel sources quite easily—like biodiesel for diesel engines, which is derived from biological feed stocks, for example. Couple this with hybrid and perhaps fuel-cell-powered cars and you can see that in the transportation sector we're already going toward electricity.

Two major sectors—transportation and heating—consume most of our energy, to the tune of at least eighty or ninety percent of all the petroleum products that are used in this country. The rest of the petroleum is used for high-valued things like plastics.

For transportation, the shift to an alternative fuel should be one that works with the same kind of infrastructure that we have now—the tanks, cars, trucks, pumps, gas stations, etc. We need a liquid fuel that can be handled in much the same way that gasoline is now. But before we choose one, there are a few other considerations that should be in the mix. First, let's make it clean, so it doesn't negatively affect the environment. Second, let's do it for national security. What I mean is that we're doing this in part because of the problems that we've got in the Middle East and we want to get ourselves extracted from there. Third, let's make sure the change has positive economic implications. And finally, we'd like the fuel not to be toxic. If you go through all of those considerations, what you end up with is ethanol.

WIE: *Ethanol? That's the one fuel that meets all of those criteria?*

PETERSEN: Yes. Ethanol, which is wood alcohol, is the best choice. That's what we said in the national energy strategy that the Arlington Institute put together for the Secretary of Defense. Interesting little side note—do you know why all cars are not burning alcohol right now?

WIE: *No. Why not?*

PETERSEN: Henry Ford wanted all cars to run on alcohol. But it was during prohibition, and the government didn't want a bunch of stills all over the place producing alcohol. So with the influence of, I'm sure, Mr. Rockefeller and some other folks, they decided that the fuel would be oil-based gasoline. But the fact of the matter is that every automobile on the road today, *every* automobile, can burn up to fifteen percent alcohol or ethanol in a mixture with gasoline. And for a minimal manufacturing cost—something like thirty dollars per car—every new vehicle could operate burning up to eighty-five percent ethanol.

So what you have is a potential instantaneous market. Every new car could become a flexible fuel vehicle, an FFV, as they're called. Ford already has a fleet of seven or eight FFV vehicles, and they don't cost any more than the regular ones. This is easy to do. This could be one decision by the President of the United States: from now on, if you're going to sell a car in this country, it has to be a flexible fuel vehicle. I think the manufacturers would all step up and say, "Yes, sir," because it wouldn't cost anything. So you could produce a real market right away. Already there are more than four million flexible fuel vehicles on the road.

WIE: *How is ethanol produced?*

PETERSEN: You can produce ethanol through distillation, but right now that uses a lot of energy and electricity because it's heated up during the distillation process. So it can't compete with gasoline, and therefore ethanol production is subsidized. The farm states love that because they can get subsidies for growing a lot of corn.

WIE: *It's made from corn now?*

PETERSEN: Yes, corn and sugar beets and sugar cane waste. But it could be made from almost *anything*, any cellulosic biomass. Do you know what the largest volume export is that the United States produces? Old corrugated cardboard cartons. And we send all of that wood fiber offshore, because we don't have anything else to do with it. All of that cardboard can be turned into alcohol. In the future, we can use biotech bugs that will chew this stuff and turn it into alcohol as a byproduct without all of the expensive costs that are now part of the distillation process.

WIE: *These would be live biotech bugs?*

PETERSEN: They're biological catalysts called enzymes. It's a clean process because it doesn't produce the effluents and other things that have come out of the refining process. More than that, ethanol burns clean. The only thing you get is a little water

out of the tailpipe of the car. From an economic point of view it's a wonderful thing. Even in the short term, suddenly you're creating immense numbers of new jobs for people in the farm areas, because they have something to grow that takes the place of what is otherwise a huge import. From a security point of view, you domesticize your fuel production, and you do it in a renewable form. We've got the numbers to show that this is completely doable, and over a period of around seven to ten years, we could carve a really big chunk out of our energy production.

WIE: *Many futurists are talking about a hydrogen economy. What's the advantage of ethanol over hydrogen?*

PETERSEN: A hydrogen economy doesn't make sense for lots of different reasons. With hydrogen you need to figure out a way to carry the stuff in a car. You need a whole new infrastructure for delivering it, because it is a gas, not a liquid. One option, though, is to make it from natural gas, which is widely available, but new, expensive pumps would have to be installed at filling stations. Much of the natural gas also comes from outside of the country. You need fuel cells that currently generate a good deal of pollution in the manufacturing process and are very expensive. So there are quite a few issues that would need to be resolved in order to produce a well-working hydrogen economy.

There is another possibility, though—hybrid electric cars. Hybrids are powered by both gasoline internal combustion engines and electric, battery-driven motors. In various driving environments, power is provided to the drive chain either solely from the electric motors, the internal combustion engine, or a combination of the two. So now you have an electric car that is powered by gasoline. You're on your way to a fully electric car. And if you can use ethanol instead of gasoline in the tank, then you've got an electric car that's powered by ethanol.

WIE: *Well, that sounds like an open-and-shut case for ethanol.*

PETERSEN: Yes, except that it needs to be marketed; it needs to be clearly articulated. We're hoping to be involved in a project to put together the plan for such a transition and get everybody together and jump on board.

One bushel of corn can produce at least 2.5 gallons of ethanol.

In 2001, approximately 1.7 billion gallons of ethanol were produced nationwide. This required 680 million bushels of corn.

WIE: *Why don't I hear environmentalists shouting about this?*

PETERSEN: I don't know. Some of them, like Amory Lovins and the Rocky Mountain Institute certainly understand and have published major studies about how to move away from oil. But I think that the best way to argue for ethanol is to say that we have to get out of oil, for all of the above-stated reasons, and shifting to ethanol coupled with increasing the energy efficiency of our vehicles is the way to actually accomplish that.

WIE: *Some people, like James Lovelock, the British scientist who came up with the Gaia theory, have been quite vocal lately, saying that nuclear power is the answer to our energy needs and that we should stop worrying so much about the radioactive waste. They say it's the only way to combat global warming.*

PETERSEN: I agree that the threat of radioactivity is overblown. I know people who could make a *very* good case that nuclear power is safe and clean and that ultimately there will be ways to deal with the waste. But I don't think you have to go to nuclear. Nuclear, to my way of thinking, is another big industrial-age kind of concept with its big machines and centralized systems. It seems a lot more elegant to me to go out and grow some corn and weeds and get rid of many kinds of waste streams and provide a lot of jobs in the process.

WIE: *Okay, so you've laid out this comprehensive vision of a transformation in energy, but what's really needed to make it happen?*

PETERSEN: Multiple 9/11s. When bin Laden sets off his nuke in some major American city, hopefully that will be a big enough shock that everybody will say, "Enough." And then we can have an ad campaign that says, "Don't pay bin Laden—pay farmers!"

WIE: *That's a good slogan. But do you really think that it's going to take that kind of extreme situation to motivate change?*

PETERSEN: There is a whole lot of vested interest in the status quo. It's a huge machine that's really hard to turn around. Unless somebody slaps you in the face and draws a little blood, most people don't think very much about changing. We're creatures of habit.

There needs to be a catalytic event that opens the door, and then you have to run through that door with a well-developed alternative, so people can see that it is really worth it to change. You need an equivalent of the Patriot Act, to use an unsavory example. Three weeks after 9/11, they passed this sweeping bill in the fury of the moment, and everybody said, "Yes!" They knew

that in three months, people were going to lose the urgency and go back to doing the same thing they did before.

So if I had nothing else to do, I would write a bunch of legislation that was ready for the day when something big happens. Then you throw the thing up on Capitol Hill and say, "This will solve the problem"—and because it is well thought-out, and in hand, it becomes easy to pass.

WIE: *Now take me forward in time. What's the fuel of the future, the fuel we will be using in thirty or forty years?*

PETERSEN: One possibility is that there will be a breakthrough in zero-point energy or cold fusion. Zero-point energy is the electromagnetic energy that exists at the most fundamental level everywhere in the universe. In a cubic centimeter in front of your face, there's energy that's equivalent to all the known matter in the universe. There are huge amounts of energy all around us. Some would even say that this energy is God or love. Some very thoughtful people would argue that, in fact, we exist as a part of God and that this energy is what God is. But whether that is true or not, if you can turn that latent energy into electricity or into heat, then you suddenly have the ability to access a usable form of energy anywhere in the universe. You can fly your spaceship to the other side of the galaxy without carrying any fuel because you can reach outside to capture it wherever you are. They have proven in the laboratory that this energy exists, but scientists haven't figured out how to engineer it up to usable levels. So people are working on that.

The other possibility is cold fusion. Cold fusion is like a battery into which you put a certain amount of energy, yet more energy is produced out of the system than is put in. It's called over-unity production—for example, you put one watt in and you get four watts out. The traditionalists would say, "That's impossible," of course, because the second law of thermodynamics tells us that energy is dissipated in any process and that you can't ever get out more than you put in. But they're assuming that we're operating in a closed system. What zero-point energy and cold fusion might very well be doing is accessing an open system—the universe. In any case, there's been enough success in the field in the past few years

that there is a bit of a resurgence of interest in research.

WIE: *When you say that there has been success in the field, what kind of success do you mean?*

PETERSEN: Over one hundred laboratories have reported successes in the cold fusion area over the last decade. The problem is that the work is just not always replicable—sometimes it seems to work and other times it doesn't. My guess is that it probably is a materials problem. There are different variables that have to get lined up in the right kind of way and when somebody finally does that, then the world is going to change. That kind of breakthrough would be equivalent to the discovery of fire. It would be so fundamental, it would change everything. But it will still be an electric world, and you'll just generate your electricity through one of those approaches.

WIE: *So there's the potential for a kind of energy revolution that really transcends anything that's come before.*

PETERSEN: Yes. If you think about it, we're in the middle of such dramatic changes today. We're on our way to genetically modifying all the life on the planet—we're already manipulating so many aspects of life that we never thought possible before. So it doesn't seem so far-fetched to me that this kind of fundamental energy revolution could happen in the not-too-distant future. ■

John Petersen is the founder and president of The Arlington Institute, a Washington, DC–area research institute. He is the author of *Out of the Blue: How to Anticipate Big Future Surprises*.

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the Guru & the Pandit

KEN WILBER & ANDREW COHEN IN DIALOGUE

KEN WILBER: PANDIT. *A scholar who is deeply proficient and immersed in spiritual wisdom. Self-described "defender of the dharma; intellectual samurai."* Hailed as "the Einstein of consciousness," Wilber is one of the most highly regarded philosophers alive today, and his work offers a comprehensive and original synthesis of the world's great psychological, philosophical, and spiritual traditions. Author of numerous books, including *Sex, Ecology, Spirituality* and *A Brief History of Everything,* Wilber is the founder of Integral Institute and a regular contributor to *WIE*.

ANDREW COHEN: GURU. *Evolutionary thinker and spiritual pathfinder. Self-described "idealist with revolutionary inclinations."* Cohen, founder of *What Is Enlightenment?* magazine, is a spiritual teacher and author widely recognized as a defining voice in the emerging field of evolutionary spirituality. Over the last decade in the pages of *WIE*, Cohen has brought together leading thinkers from East and West—mystics and materialists, philosophers and psychologists—to explore the significance of a new spirituality for the new millennium. His books include *Embracing Heaven & Earth* and *Living Enlightenment.*

Higher Integration

Bridging the Gap Between the Map & the Territory

Dialogue IX

What will the next levels of human development look like? In their ninth dialogue, guru and pandit take a closer look at the leading edge, asking what an "integral" worldview really means and exploring still higher potentials for the evolution of consciousness.

ANDREW COHEN: Lately, I've been thinking a lot about the word "integral" and wondering what it really means to have an integral perspective. This is obviously what your own work is all about, and it's a concept that more and more people are becoming familiar with these days. The words "integral" and "second tier" are being used as catchphrases to point to the next stage of development for many of us in this postmodern culture. So I thought it would be good to speak

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specifically about what integral, or second tier, really means, especially in relationship to the spiritual dimension of life.

My own understanding of integral is that, to put it simply, it points to a more integrated and comprehensive perspective not only on our own experience but on the very structure of the cosmos. But what I want to talk to you about is an important distinction I've become aware of between the direct, *intuitive* recognition of an integrated cosmos and a similar understanding that is more intellectually based.

KEN WILBER: Yes, I understand the distinction. Your talk and your walk.

COHEN: Right. We could call it the difference between looking at the cosmos from the inside out and from the outside in. In this distinction I'm making, we could say that the inside-out perception would be one that was based on a spiritual realization, while the outside-in perception wouldn't necessarily have any spiritual dimension to it. One reason I'm interested in this is because I have noticed that a lot of people who have a good cognitive grasp of what an integral, or second tier, perspective is seem to lose that perspective when it comes to their own spiritual life. Their spiritual paths often don't echo or relate directly to the higher, impersonal, evolutionary perspective that second tier cognitive capacities can reveal. A lot of the spirituality can be extremely personally focused and even "new-age." In short, one finds individuals with very big views who still have narrow spiritual orientations.

WILBER: (Laughs) Well, somebody's confused!

COHEN: I find it hard to understand how someone can cognitively grasp a second tier, or integral, perspective but embrace a spiritual path that has literally nothing to do with it. So it would be good to go into this question together: What *is* second tier spirituality? I feel, and I'm sure you would agree, that ultimately as we evolve, especially if we evolve integrally, our spiritual view would be seamlessly interrelated with our worldview, with our moral, ethical, and philosophical perspective.

AN INTEGRAL MAP

WILBER: You've raised a very interesting point. A lot of people are using developmental models like Spiral Dynamics, based on Clare Graves' work, or Robert Kegan's system or Jane Loevinger's system, and there's some confusion about what's called second tier or integral. However we want to define it, it generally refers to the highest levels that any Western model looks at. In Spiral Dynamics, the two highest stages that they recognize are called "yellow" and "turquoise," and those together are referred to as second tier. In Jane Loevinger's scale those are roughly equivalent to the levels that she calls "autonomous" and "integrated." And in Robert Kegan's five orders of consciousness, second tier would be roughly equivalent to his fifth order.

So these are the highest levels in all the Western models, and therefore many people think that if they are doing spiritual work, they must be second tier. But actually, if you look at the descriptions in any of these models, second tier isn't really spiritual. Take, for example, the yellow and turquoise levels in Spiral Dynamics—neither of them is what we would really recognize as nondual or mystical or transpersonal or transrational. What they call yellow is actually entirely secular, and its descriptions of the world are very systemic—everything is interrelated—but it's just an ecological worldview without any unmanifest or unborn or even spiritual kind of dimension. At turquoise, people say things like, "The earth is a single organism with one consciousness." Now this starts to sound spiritual, and in a certain way I suppose it is, but it's not a direct experience. It's still just an idea.

The point is that there are higher stages than that, if you actually look at the traditions and at cutting-edge research. But higher stages are extremely rare, so they just don't tend to show up in the research most psychologists are doing. It's not necessarily a fault of the Western models that I just mentioned, because they basically reported what they found. It's just the rarity of people at these stages.

If you take Sri Aurobindo's consciousness stages as a point of comparison—he has about ten or eleven—what he calls "higher mind" would be equivalent to what Spiral Dynamics would call second tier, or yellow and turquoise. But above higher mind there is illumined mind, then intuitive mind, then overmind, then supermind, and then satchitananda, the ever-present oneness. There are at least four or five stages up there that are higher than second tier. So second tier is sometimes referred to as "integral" only because it's more integral than first tier. But these higher stages will be even more integral, all the way to satchitananda, which is like superintegral, including everything.

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KEN WILBER

COHEN: Yes, absolute integration.

WILBER: Exactly. We could use the term "third tier" for whatever stages are higher than second tier—illumined mind, intuitive mind, overmind, and supermind, for example, as actual, permanent developmental stages. But the thing about second tier is that it's a great base camp for all higher development. If you don't have a really good foundation there, when you get to these higher stages, they won't stick very well.

COHEN: Yes, and what I'm saying is that a lot of people who do seem to have a well-established systems, or integrated, worldview—

WILBER: Well, cognitively.

COHEN: Yes—which is, relatively speaking, quite a big deal—

WILBER: —don't have their personal or transpersonal act together. Well, that gets us to a second point, which is that the cognitive line of development—which is usually necessary but not sufficient for other development—can run quite ahead of the individual's center of gravity. So there are a lot of people talking integral because that's just what's out there. And everybody wants to be integral. But if somebody is integral cognitively, they can still have a center of gravity, frankly, that's several stages lower. It happens quite often. And it's a little disorienting because they talk one thing and walk another.

COHEN: Yes. It's a strange mix and it certainly is disorienting, because for most of us, our deepest emotionally based convictions tend to be our spiritual convictions. So when one cognitively has a second tier understanding but one is emotionally identified with the sentimental and even superstitious spiritual beliefs of a lower level—

WILBER: —it's a problem.

COHEN: There's this dissonance—because there's a profound contradiction between a second tier perspective and the emotionally based spiritual convictions of a lower stage.

WILBER: That's a real concern. And nobody has stated that caution more strongly than I have in my own works. I tell people that if you understand my books, you're at least up to second tier, cognitively. But that doesn't guarantee anything, because again, you can simply *think* that way but your center of gravity could be lower.

So my work is just a map. And, of course, you don't want to confuse the map with the territory. But maps are extraordinarily helpful. After all, do you really want to go into Antarctica or Africa without a map? But I'm concerned about people merely taking this map and by learning it thinking that somehow they have awakened to the territory. The map is self-critical though, in that it says, "Here's a presentation that's roughly, to use Aurobindo's terms, higher mind to illumined mind. But above that, *you* have really got to push into intuitive mind, overmind, supermind, satchitananda. And it's going to take your own realization and your own work and your own practice, and I recommend spiritual teachers for this because you're going to delude yourself all the way up. You've got to have somebody basically boxing your ears, so get ready for that—it's a lot of fun."

COHEN: You can say that again!

WILBER: Like I said, second tier is really just a base camp. If you actually get oriented, get a good grounding there, then you can start unfolding it from within and actually make it a first-person

DEVELOPMENTAL TERMINOLOGY

An integral approach to human development sees individuals and cultures evolving through various **stages**, or **levels.** There are many developmental models that illustrate this, but one of the most accessible and commonly used is Spiral Dynamics, based on the work of Clare Graves. This model identifies each stage of development by color, and these are divided into two tiers: **first tier** spans from primitive hunter-gatherer consciousness to postmodern, pluralistic consciousness. **Second tier** represents the highest levels, of which Spiral Dynamics has identified only two or three currently present in humanity. While each level is more comprehensive than its predecessor, it is only from second tier consciousness that there can be a true appreciation and integration of all previous levels. Some theorists, including Ken Wilber and Andrew Cohen, also use the term **third tier** to refer to all levels that are beyond the scope of most Western models, or those states and stages that reflect transpersonal, nondual, or enlightened modes of consciousness.

For a multimedia introduction to Spiral Dynamics, visit wie.org/spiraldynamics

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realization and not a third-person map. So "integral" for most people right now means intellectually pushing into second tier. But that's just a good start. There's so much more work to do. The percentage of people stably at second tier is one half percent of the U.S. population! So it's really going uphill. I mean, the center of gravity in this culture is still very much what we would call first tier. So what we're trying to do is really orient people to second tier and then push them into third tier. What happens in what we're calling second tier is that people become self-aware of integral. Evolution becomes aware of itself. And it's a *huge* leap. That's why so many psychologists refer to the "leap" or "jump" from first tier to second tier. So we call second tier integral because it self-consciously becomes integral.

COHEN: Yes. When it becomes self-consciously integral, that's when it's from the inside out, right? That's the beginning.

WILBER: That's when it begins. So we have two things going on here. You can talk second tier, but your walk—your center of gravity—can still be first tier. That's extremely common now. But when you get your walk and your talk at second tier, there's still third tier waiting. And really, you have to keep going on into third tier. And then integral will flow out of yourself and into the world; it will start embracing everything, and not just as an altered state but as a permanent trait.

COHEN: Yes. And when the integral perspective meets a third tier, or enlightened, state of consciousness, our understanding of what that state is and what it means will actually begin to change. The traditional definitions will be replaced by new ones that are more integrated, that are endeavoring to embrace all of manifestation. This is what really sets my heart on fire—when our understanding and expression of enlightenment itself begins to evolve in real time, right before our very eyes.

WILBER: I think that's exactly what begins to happen.

NEW TERRITORY

COHEN: You know, ever since I started teaching almost twenty years ago, I have been consumed by this question: What does an uncompromised and uninhibited expression of enlightened consciousness look like in a postmodern twenty-first-century context? Or to use the terms of our discussion today, what would a second or even third tier perspective really mean—in real life, for you and for me? Not just in terms of some idealized state, but in terms of our actual level of development as fully human beings. Usually, when people experience higher states of consciousness, they effortlessly and ecstatically relate to a higher, or what I would call enlightened, perspective. But unfortunately, it rarely informs the way they relate to their experience, or the experience of others, the rest of the time. What I'm interested in, of course, is the rest of the time. Because what happens when people are just experiencing higher states doesn't necessarily mean that much, or it is significant only to the degree that one is able to sustain the enlightened perspective throughout all changing states.

That perspective, of course, reveals to us a completely different way of seeing and understanding and, ultimately, even *feeling*. When an individual actually does evolve, miraculously they begin to *feel* from a higher or more impersonal dimension of themselves. They find it more and more difficult to relate emotionally from a merely personal place. But that's a big leap for most of us.

WILBER: You know, when Aurobindo talks about intuitive mind and overmind and supermind, it's very telling that he uses the word mind. Because you can also say that there are intuitive emotions, and over-emotions, and super-emotions. The same with motivation—there's intuitive motivation and over-motivation and super-motivation. So there are all those other lines of development that go up the hill with the mind line, or cognitive line. But we still find that the cognitive line is usually necessary for these other lines to stick. If you don't have intuitive mind awakened, and overmind awakened, and supermind awakened, the emotions won't stick up there—they'll come and go. And the higher motivations won't stick—they'll come and go.

COHEN: That's very true. That's why now, in my own work, I always put the greatest emphasis on the need to cultivate a very big perspective, and why I agree with you that we need a clear map of the territory that we are aspiring to leap into. Without that map or context, it's very difficult to make sense out of our own experience, especially as we begin to enter into higher states of consciousness. The experiences themselves, while soothing for the soul and liberating for the spirit, simply do not clarify the overarching developmental context in which they are occurring.

"THE ULTIMATE PURPOSE OF A MAP IS THAT IT CAN HELP US TO CONTINUOUSLY ORIENT OURSELVES TO A HIGHER, MORE ENLIGHTENED CONTEXT THROUGHOUT ALL CHANGING STATES."

ANDREW COHEN

That's one of the reasons that it's so common for people to continue to get lost again and again in the ego's limited perspective, even though they may have transcended it—seen and felt and known beyond it—many, many times. So to me, the ultimate purpose of a map is that it can help us to continuously orient ourselves to a higher, more enlightened context throughout all changing states.

WILBER: What happens in my work and what happens in yours is a little bit different, I think. I'm primarily trying to orient people to second tier as an integral base camp. You're trying to push them into third tier. So, what happens with me is that, as we were saying, a lot of people come who are *talking* second tier, but really have a first tier center of gravity. You're dealing with people who often have third tier experiences or realizations, but how to actually live it, in a way that includes first and second tier, is the rub.

COHEN: It's a big rub.

WILBER: People have experiences, but how they handle them, that's what you have to deal with. That's when people fall apart.

COHEN: Yes, because not everybody has what it takes to live up to what they have realized.

WILBER: And that's what you have to deal with as a guru. You're standing up as a guru, which takes courage; it takes a certain awareness; it takes a certain openness. Students regularly get offended and you have to deal with that. So that's a very difficult issue.

COHEN: Especially in this culture. So the big challenge is really being willing to make the effort necessary to stretch ourselves in order to learn what the higher-state experiences we have actually mean. Because often on an experiential level, we can go a lot further than we may yet be able to understand and interpret appropriately. As we've spoken about in the past, to make this leap to a higher-level interpretation is a very big thing. That's new territory.

WILBER: It's new territory, and it's a constant uphill battle, as you know.

COHEN: It is an uphill battle. But there's a point where one's center of gravity shifts in a fundamental way. We could say this shift would be the beginning of a genuine transformation or leap to a higher stage of development. The way I would describe it would be a shift in the balance of power within the individual from the ego to what I call the authentic self. When the balance of power shifts not less than fifty-one percent to the authentic self, a fundamental corner has been turned. Now the individual is able to wholeheartedly direct their energy to the evolution of consciousness because the resistance, the *fundamental* resistance, has been overpowered by the ecstatic compulsion to evolve that is the nature of the authentic self.

WILBER: I agree with that. I think percentage is the way to look at it. I really don't think it's problematic to say that I can have three or five or twenty percent old, conditioned stuff and I can have five or ten or twenty—or fifty-one—percent radically new stuff going on. They're not mutually exclusive. And I think that's what makes it so interesting for pioneers—they're poking their way into things that have never been seen before and shaking the old stuff off at the same time.

COHEN: Absolutely. There's no other way to do it. But when the balance shifts fifty-one percent to the authentic self, the individual is not a seeker anymore. Now they have become, to that degree, one with God or the evolutionary principle and that's what is driving them—even if they still have forty-nine percent to go.

WILBER: Yes. When fifty-one percent of them gets over the hill, in a sense it's downhill from there, but there are still a lot of bumps going downhill.

COHEN: Another way to describe it is like there's a tractor beam that is literally pulling one forward.

WILBER: Yes, that's a better way to look at it. But that path hasn't been grooved yet. We've talked about that part before in terms of the model that I'm developing on postmetaphysics, and I think we're in agreement on this. Some of these higher stages, even though the great sages have pioneered them, haven't really been laid down as Kosmic memories, or Kosmic grooves, the way first tier or even beginning second tier has. For example, most of the early stages of development have been around for thousands of years. And billions of human beings have gone through them so that now they are automatically part of development. They're as rutted as the Grand Canyon, which may go down a mile. But new stages—as *stages*, not as temporary ecstatic states—might be a yard or two deep, that's all that's been cut yet. And so, boy, it's hard to make things stick in that.

"EVERY ACT YOU MAKE ON THE LEADING EDGE BECOMES A GROOVE THAT SUBSEQUENT HUMAN BEINGS WILL FOLLOW. THEREFORE, YOU WANT TO DO YOUR BEST WITH EVERY SINGLE BREATH YOU TAKE."

KEN WILBER

COHEN: Precisely.

WILBER: And anybody who's pushing into those stages is basically going out next to the Grand Canyon, taking a stick, and starting to dig another groove. But it's still a tractor beam of Spirit. It's still Eros. It's still the leading edge of spirit's own unfolding. And once fifty-one percent of you gets behind it, then you really do feel God is moving in you, and evolution is speaking through you, and Spirit is unfolding through you, consciously.

COHEN: That's what evolutionary enlightenment is all about.

AN ETHICAL IMPERATIVE

WILBER: Working with all this is such a strange experience—I go back and forth. I get excited on the one hand because so much stuff is happening and it really is leading edge and it's wonderful. But then on the other hand, I look at what a tiny percentage of the population has actually reached these levels and it always sort of brings me back to earth.

COHEN: I know. Often I remind myself of that. Because sometimes I'm so wrapped up in what I'm trying to do and think it's so important—and I do believe that it is—but at the same time, in the big picture, it can suddenly seem so insignificant.

WILBER: And then on the other hand, you can get excited by remembering that Paul Tillich said that what we call the Renaissance was participated in by only about a thousand people.

COHEN: I've heard that. That's so exciting! Because a snowball can start rolling.

WILBER: Yes, when somebody pushes through. That's what they were doing in the Renaissance—pushing into the first modern values. They were really pioneering that stage of development and that spearheaded the creation of that Kosmic groove for the rest of us.

COHEN: Intuitively, it always feels that if a small but not insignificant number of people become stabilized in a new and higher perspective, something could explode.

WILBER: Absolutely. And for me that's a very galvanizing ethical realization.

COHEN: Ethical in what sense?

WILBER: Well, in the sense that every act you make on the leading edge becomes a groove that subsequent human beings will follow. Therefore, you want to do your best with every single breath you take.

COHEN: Amen!

WILBER: That's what we could call the evolutionary ethical imperative. You know, Immanuel Kant was famous for his "categorical imperative"—he said something was autonomous and ethical if the rule that governed your behavior was universal. So he said, "Act as if everything you do might actually become a universal rule." Well, this is even a little bit stronger. If this is true, what you're doing *is* actually becoming a universal groove. Therefore, please act as if everything you do is creating that groove; please be the most ethical, the most responsible, the most authentic you can be with every breath you take, because you are cutting a path into tomorrow that others will follow.

COHEN: And if you cross that fifty-one percent threshold, that fact is something that you will intuitively be aware of.

WILBER: And that realization is ethically bracing.

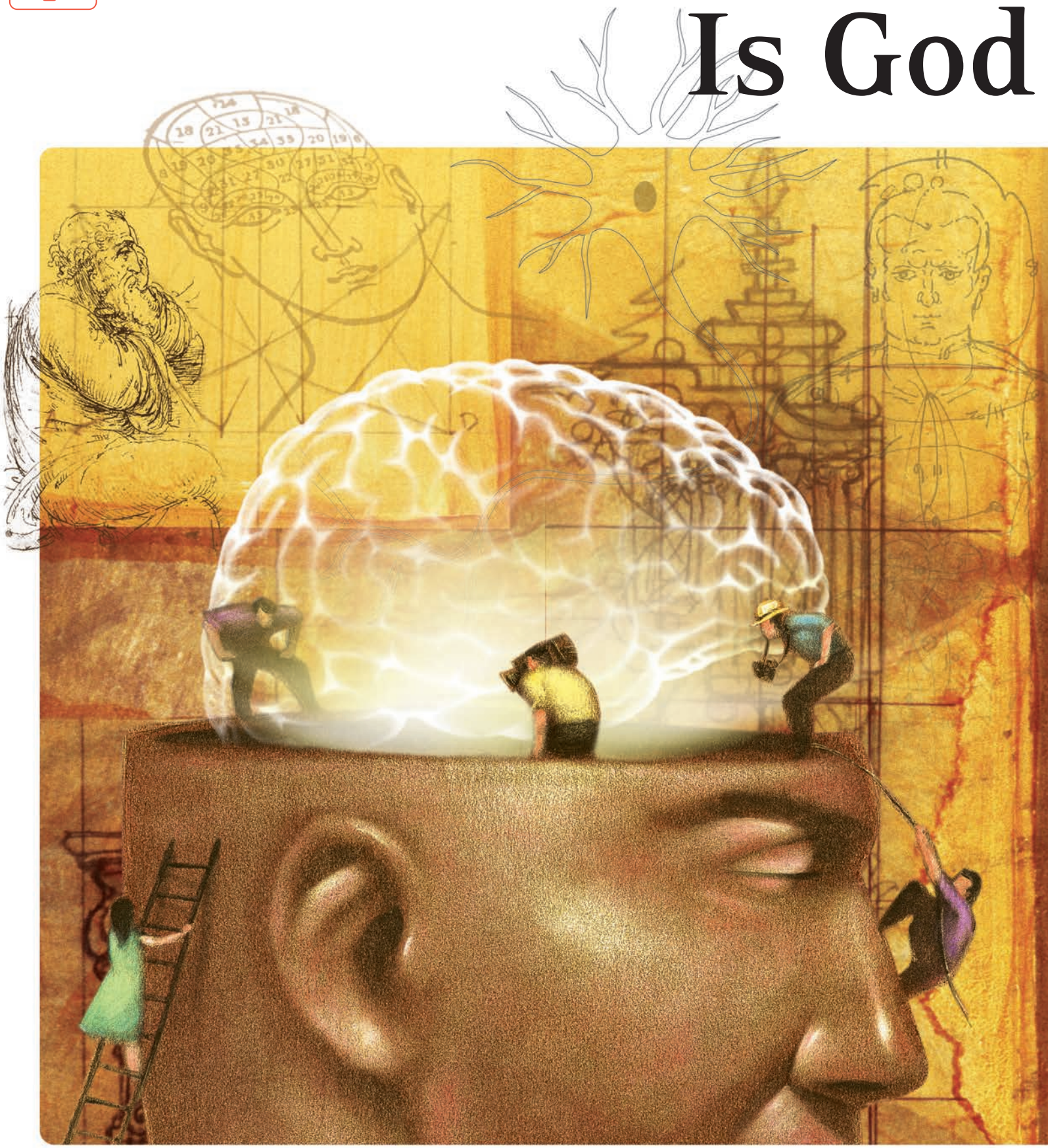
COHEN: Yes. If we stick with it, our very motive eventually evolves. When we begin on the path, it's all about ourselves. But once we cross that threshold, it becomes more and more obvious that it never could have been. Our motive for transformation changes spontaneously and dramatically as we come to recognize that our own development has always only been for the sake of the evolution of consciousness itself. And it's not a romantic ideal. *That's just all there is.* That's where I believe a new moral context is going to come from.

WILBER: I do too. It starts at second tier, and it becomes a living reality at third tier. And it really is that realization that your every move, your every breath, your every thought is literally becoming a Kosmic habit or memory that humanity will follow. And you can do it wrong. I mean, history is full of examples of when a particular stage started out healthy and then got very unhealthy. That's why it's so bracing, because you can do it wrong as well.

COHEN: Absolutely. That's why it's so important that we do it right. Because the future really is depending on each and every one of us. When we realize this, the dawning recognition that "it really is up to me" becomes overwhelming. I call that the spiritual conscience, or higher conscience, which is the door to the future. ■

feature

Is God



All in Your Head?

Inside science's quest to solve the mystery of consciousness

by Craig Hamilton

LIKE A LOT OF PEOPLE INTERESTED IN MATTERS of the spirit, I've always had a somewhat conflicted relationship to science. On the one hand, for anyone interested in humanity's further evolution, it's hard not to be excited by the latest findings of a discipline that, in a single century, has managed to cure polio, crack the genetic code, send a probe to Saturn's largest moon, and invent the internet. But on the other, there is something about science's tendency to reduce even life's greatest mysteries to the movements of matter alone that has always left me a little chilled.

It probably goes back to my childhood. Raised by theologically ambivalent parents who were as committed to their agnosticism as many are to their faith, I was taught early on that science, reason, and rationality are a far better guide to truth than inspiration, doctrine, or dogma. But as years passed, and my inbred agnosticism gradually gave way to a committed spiritual quest, I soon began to have experiences of a deeper reality, far beyond anything described in my science textbooks. In the face of this unfolding world of meaning, purpose, and mystery, the notion that science held the keys to ultimate truth began to seem increasingly hard to accept.

I think the tension between these two sides of myself hit its peak during my senior year in college. Having majored in psychology because I thought it would help me understand human nature, I'd spent my first three years judiciously avoiding the "harder" scientific side of the field, focusing instead on the "softer," therapeutic, social, and humanistic dimensions. So when I finally signed up for the dreaded, mandatory "Statistical and Experimental Methods" course,

the last thing I expected was to be interested. But as we sank our teeth into data analysis and experimental design, once-foreign concepts like "statistical significance" and "double-blind control" began to take on an aura of magic for me. Even in our mock experiments, the fact that I could scientifically, experimentally, *statistically prove* that one hypothesis was right and another wrong acted on my nervous system almost like a drug. By the end of the term, to the disbelief of my friends, I was even considering applying to graduate school in experimental psychology. But as I began to look a bit more closely at what would be involved, I soon came face to face with an almost dogmatic materialism that seemed to grip the entire field. In the end, my interest in higher matters got the better of me, and it was my minor in religious studies and my growing passion for the spiritual quest that ultimately set the course for my life and career.

Although the call of the spirit saved me from a life in the laboratory, however, my sympathies for science haven't gone away. One result of this split personality is that whenever I'm confronted with the battle between science and religion, I always find it hard to take sides and end up in a sort of internal battle of my own. Whether it's the ethical debate surrounding biotechnology or the argument over the anthropic principle* in cosmology, it's as if I have a red-horned skeptic on one shoulder and a white-winged believer on the other, and it's hard to know who to listen to.

Admittedly, the further I look back in history, the less ambiguous it gets. When I think of Giordano Bruno having an iron rod driven through his tongue and being burned at the stake for proclaiming that the universe is populated with other suns just like ours, I don't have much difficulty condemning the Church's narrow-mindedness, to say nothing of its tactics. And there is certainly no doubt in my mind over what the outcome of Galileo's trial should have been. But follow the timeline a little closer to the present, and, for me at least, the picture quickly starts to muddy. Take the evolution vs. creation debate. There are few public expressions of ignorance more annoying than the insistence by fundamentalist Christians that biblical creationism be taught as an "alternative theory of origin" in our public schools. Yet when I see evolutionary biologists using the unproven dogmas of neo-Darwinian theory to convince our kids that they live in a purposeless universe, my sympathies toward science start to fade once again.

Of course, if the science and religion battle were to stop with the debate over biological evolution, I would, in the end, have to come down on the side of science, even if I were to quibble over the interpretation of some of the data. But if current trends are any indication, the battle is not stopping there. Nor does it seem to be calming down. In fact, in recent years, thanks to the ambitions of two influential new scientific disciplines, the attack from the science side seems to have taken a somewhat more insistent turn. And this time, the target is nothing less than our humanity itself.

The first of these emerging disciplines is evolutionary psychology. Originally dubbed "sociobiology" by biologist Edward O. Wilson, this relatively new field of study is responsible for the frequent headlines in Sunday science sections announcing the evolutionary origins of such complex human tendencies as monogamy, moral outrage, and our love of golf. Think Darwin as humanity's psychoanalyst, tracing the psychological quirks of the species to the adaptive challenges we faced in our childhood on the ancient savannah. Armed with this powerful new explanatory tool, a growing throng of theorists are racing to force every aspect of higher human behavior—from altruism to spiritual seeking—through the mechanistic grid of natural selection. As a result, many dimensions of human experience that were once considered to be beyond science's explanatory reach are now coming under the scrutiny of the microscope.

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But as effective as evolutionary psychology has been at stretching Darwin's dangerous idea to its logical limit, it is still largely a theoretical discipline, deriving its strength more from the explanatory power of its model than from the testability of its hypotheses. As such, it is, at best, still a moderate weapon in the arsenal of those who aim to scientifically explain the causes of human behavior and experience. For the heavy artillery, however, they need not look far. The thriving field of neuroscience promises to fill that void and then some. Employing powerful

*The observation that the physical constants of the universe seem to be finely tuned to allow the existence of life. Were the strong nuclear force only slightly different in strength, for instance, the stars could not shine and life as we know it would not exist. Some cosmologists have argued that this "fine-tuning" is evidence that the unfolding of cosmic evolution may be an expression of some kind of higher or even divine intelligence.

new methods for studying the intimate workings of the brain, the pioneers of this increasingly self-assured discipline aspire to demonstrate once and for all that the mind, emotions, and even consciousness itself are entirely generated by the three-pound lump of gray matter in our skulls. For a generation of researchers in this field, the prime directive is to prove what Nobel laureate Francis Crick, who turned to neuroscience after co-discovering the DNA helix, called "the astonishing hypothesis": That "you, your joys and sorrows, your memories and your ambitions, your sense of personal identity and free will are in fact no more than the behavior of a vast assembly of nerve cells and their associated molecules. . . . You are nothing but a pack of neurons."

Now at the dawn of the twenty-first century, the notion that the brain is *somehow* involved in mental life and consciousness is one that even the most devout among us would be hard-pressed to question. As consciousness researcher Marilyn Schlitz put it on the PBS program *Closer to Truth*, "All we have to do is take a sledgehammer and bang somebody over the head to see a reduction in consciousness." But the question of just *what* role the brain plays in mental and emotional life is another matter. And it is here that we enter the thorny territory.

Many dimensions of human experience that were once considered beyond science's explanatory reach are now coming under the scrutiny of the microscope.

In a recent *New York Times* column entitled "The Duel Between Body and Soul," developmental psychologist Paul Bloom describes a conversation he had with his six-year-old son, Max, in which he asked him about the function of the brain: "[Max] said that it is very important and involved in a lot of thinking—but it is not the source of dreaming or feeling sad or loving his brother. Max said that's what *he* does, though he admitted that his brain might help him out." Bloom, who clearly aligns himself with the neuroscientific perspective, goes on to explain that "studies from developmental psychology suggest that young children do not see their brain as the source of conscious experience and will. They see it instead as a tool we use for certain mental operations. It is a cognitive prosthesis, added to the soul to increase its computing power." And, Bloom laments, "This understanding might not be so different from that of many adults."

In my own case at least, Bloom has, I think, hit the nail on the head. For all of my studies in psychology, I must confess that my own idea about the relationship between the mind and the brain has remained something like that portrayed by the scarecrow in the *Wizard of Oz*. Despite his melancholy mantra, "If I only had a brain," the straw-stuffed overalls still had plenty of personality and emotion and at least enough cognitive capacity to get through the day. Although you probably wouldn't ask him to sort out the dinner bill, there was clearly somebody home. Indeed, when I was cast in the role in an eighth-grade school play, I knew what I had to do. Just act a bit dopey and absent-minded. Probably to the play's benefit, I didn't consult with any neuroscientists about what it might actually be like to not have a brain. And while my ideas have no doubt matured somewhat over the years, if you were to ask me to describe my current thinking on this issue, I don't think I could do better than Bloom's description of the brain as a "cognitive prosthesis" for the soul.

In light of Bloom's analysis, it seems likely that I'm not alone. Which means we have a bit of a problem on our hands. Because, although in the case of children this belief could be attributable to a lack of learning, where adults are concerned, the issue seems to cut deeper. A lot deeper. Despite the insistence of neuroscientists that our brains are the sole source of our experience and behavior, there are very strong reasons why most of us don't want to believe that this is the case. For starters, for most of us with religious or spiritual inclinations, accepting such a premise would eradicate, in one fell swoop, one of our most basic convictions—the belief in an immaterial soul or (if we're Buddhists) "mind essence" that transcends the physical body. Even for those who do not count themselves among the faithful, the notion that we are entirely reducible to brain stuff still seems to take away something essential—our humanity, our dignity, our sense of meaning. In my own case, no matter how hard I try, I find it exceedingly hard to accept that I am just my brain. And it's not just because I've had mystical experiences that point to the existence of something beyond the material. There is something about the experience of consciousness itself, some kind of mystery inherent in the fact that we are conscious at all, that seems irreducible to the mere firing of our neurons. As convinced as the neuroscientists are of their case, I can't help feeling there must be more to the story.

And here, as they say, is the rub. Because if I take a step back from my own convictions, there is something about this picture that starts to look suspiciously familiar. After all, isn't this how religious people always feel when their ideas are being challenged by science? Is there any difference between what

I'm experiencing and what the elders of the Church felt when Galileo attempted to oust the Earth (and thus human beings) from the center of God's universe? Could it be that far removed from how some Southern Baptists feel when the science teachers try to convince their children that God didn't create the world in six days? In all of my postmodern sophistication, those stories sound to me like an adolescent unwillingness to grow up. But can I be sure that I'm not guilty of the same thing?

I would, of course, like to think that the current situation is different—that, in attempting to penetrate the mysteries of the human soul, science has finally flown a bit too close to the sun. But given the trajectory of the science and religion debate over the past few hundred years, it would be hubris at this point not to take the claims of neuroscience seriously. As atheist apologist Keith Augustine put it in a recent essay on infidels.org:

> *Historically in the "war between science and religion" the "reconciliation" has always fallen on the side of science with theologians scrambling to redefine their faith in order to make it compatible with new scientific evidence. . . . That we never see the reverse—scientists scrambling over the latest theological speculation—illustrates the authoritative dominance of science over religious belief in the modern world. Scientific explanations of phenomena have been so successful that today believers are trying to develop scientifically informed theologies.*

Indeed, given the legacy of abandoned dogmas that the encounter with science has left in religion's wake, it would be more than a little naïve for us to think that as scientists begin to probe the mysteries of the brain, our sense of who we are would come out unscathed. We are clearly in a challenging predicament. And for all of my ambivalence on the science and religion debate, I have to admit that this round makes the others look easy—particularly for those of us with spiritual inclinations who also feel compelled, as a matter of integrity, to follow the truth wherever it leads. Are we willing to question our spiritual convictions deeply enough to grapple with what neuroscience has to say about the matter?

> **"You, your joys and sorrows, your memories and your ambitions, your sense of personal identity and free will are in fact no more than the behavior of a vast assembly of nerve cells and their associated molecules."**
>
> *Francis Crick*

It was my own recognition of this predicament last spring that convinced me that if I was to avoid ending up on the side of ignorance, I would have to dive into the unknown waters of brain science and find out for myself what the fuss is all about. What does it actually mean to say that our brains are the sole source of our experience? What evidence is there to prove it? And assuming it was true, would that mean that all of our spirituality is a ruse? Could the brain in fact be the soul? Over the past year, my journey into this mind-bending world has taken me from the cutting-edge conference on "consciousness studies" to the offices of some of the leading thinkers in the field to the laboratories of a few pioneering scientists who, far from the mainstream, are working to usher in a new, more holistic paradigm that is as true to the spirit as it is to the data. In the course of this adventure, I have moved in and out of confusion more times than I care to count. And though I can't say that as of this writing I have entirely found my way to the other side, what I can say is that I have learned a lot about the miraculous and as-yet mysterious workings of a part of myself I had honestly never given much thought—my own brain.

THE 10% MYTH

Everybody knows we only use ten percent of our brain, right? Not according to neuroscience. This modern myth, made popular by the self-help movement, is in fact not grounded in science at all. Through brain imaging techniques, scientists have learned that, although no single activity employs the entire brain, in the course of a day, we use it all.

"The hard problem is the question of how physical processes in the brain give rise to subjective experience."

David Chalmers

PART ONE: toward a science of consciousness

NEURAL CORRELATES OF CONSCIOUSNESS?

"Consciousness: that annoying time between naps," read the bumper sticker on a dusty SUV with California plates. It was barely nine AM, and the Arizona sun was already scorching as I made my way across the sprawling parking lots surrounding the Tucson Conference Center. On the heels of an unusually cold New England winter, I had come to the desert prepared for a reprieve, but in my long sleeves, I was still overdressed. A nondescript southwestern city, Tucson seemed an unlikely place for *the* cutting-edge conference on consciousness studies. But for those in the know, it is here that every other year for the past decade the brightest minds in mind science have gathered in pursuit of "a science of consciousness."

If ten years sounds like a short record for the defining conference in a major scientific field, it only owes to the fact that the notion that something as ineffable as consciousness can be scientifically studied is itself a relatively new idea. Having built its empire on the pursuit of the third-person "objective" perspective, science in general has long considered consciousness or subjective experience to be, at best, beyond the scope of its inquiry, and, at worst, irrelevant. There was a period in the early days of psychology, when William James and other introspectionists made a foray into the subjective domain by beginning to observe and chronicle the workings of their own minds. But this was quickly expelled from the discipline by James B. Watson's introduction of behaviorism in the early 1900s, which promised to make psychology a respectable science by limiting it

to the study of observable behavior. With the birth of cognitive psychology in the 1960s, and the subsequent decline of behaviorism, gradually the word "consciousness" began to trickle back into play. It wasn't until the early 1990s, however, that it would emerge as a serious area of study in its own right, due in large part to the increasing boldness of neuroscientists like Francis Crick. In an influential 1990 paper cowritten with his research partner Christof Koch, Crick, who had been determined from an early age to disprove the existence of God and the soul, made a passionate call for neuroscience to begin employing its growing scientific arsenal to demonstrate the material basis of consciousness. The paper was apparently a mark of the times, as, over the next few years, the field of consciousness studies surged into being, culminating in the inauguration of the first Tucson conference in 1994.

If the scene surrounding the opening plenary at the 2004 conference was any indication, in the ten years since, consciousness has become a hot topic. As I made my way into the conference center's largest ballroom, some eight hundred chairs faced a large video screen and stage, and cameramen jockeyed for position. Though the main section was already filled by the time I arrived, I managed to find a lone seat up front just as the conference organizer, MC, and resident bad-boy David Chalmers took the stage. Sporting faded jeans, a half-tucked-in T-shirt, black leather jacket, and scraggly long hair, the 39-year-old Australian would have been more convincing as a heavy metal singer than as one of the world's most respected philosophers of mind. But ever since the 1994 conference, when he famously challenged the audience to face up to the "hard problem" of consciousness, it's been difficult to read anything on the relationship between mind and brain without encountering Chalmers' name.

The "hard problem," as Chalmers defines it, "is the question of how physical processes in the brain give rise to subjective experience." This is as distinguished from the "easy problems" of consciousness, which involve understanding such things as the neural mechanisms behind perception, how we pay attention, and the differences between waking and sleep. The essence of Chalmers' challenge, which has seemingly been taken seriously by nearly everyone in the field, is that making progress on the "easy problems," as worthy an endeavor as that might be, does not necessarily bring us any closer to solving the hard problem. And where a scientific understanding of consciousness is concerned, the hard problem is *the* problem.

Those who studied a bit of philosophy in college may recognize in Chalmers' hard problem a restatement of the classic "mind/body problem"—what Schopenhauer called "the world knot"—that philosophers have been arguing about over the past few centuries. Ever since René Descartes gave birth to dualism by asserting the separation of mind and body, the big issue in the philosophy of mind has been figuring out how these two different substances—the mental and the physical—could interact with one another. On one hand, how could an objective, physical brain give rise to subjective, mental events? And on the other, how could those subjective, mental events—presumably not governed by physical laws—impact the objective, physical world?

The title of the opening session, and the theme for the conference as a whole, was "Neural Correlates of Consciousness," or NCCs, as they would come to be called. After a few welcoming words from Chalmers, we moved straight to our panel of three speakers, who would address what many consider to be the leading edge of the neurobiological approach to consciousness. The first speaker was, fittingly, Christof Koch, whose work with Francis Crick on vision and consciousness has made him one of the stars of the neuroscience world. With a delivery style that seemed to suggest he'd failed to heed the warnings about mixing high doses of caffeine with amphetamines, Koch proceeded to cram what seemed to be an entire semester of lecture notes into a thirty-minute session. I must confess to not having understood a word of it, but after concentrating as hard as I could on the next two panelists and listening to the often contentious debate that followed, I was able to piece together the rough outlines of the theory.

What Koch and other neurobiologists on the trail of NCCs are attempting to uncover is just how the brain behaves differently on the neuronal level when we are consciously perceiving something as opposed to when we are perceiving that same object unconsciously. Now, for most of us, the notion that we even could perceive something unconsciously probably sounds like an oxymoron. To illustrate, Koch refers to a curious and rather counterintuitive phenomenon known as "binocular rivalry."

A simple explanation would go something like this: Although most of us tend to think of ourselves as somehow looking out at the world through our eyes, the nature of vision is not at all as we experience it. What is actually happening is that two different inverted two-dimensional images are falling on the back of your two retinas and being sent to some thirty different visual centers in your brain for processing, the result of which, mysteriously, is the unified three-dimensional picture of the world you see. How that happens is an example of what is known as "the binding problem" and is itself a mystery that no one has yet solved convincingly. For the moment, though,

what's important to understand is that each of your eyes is seeing a different part of the picture, and your brain is piecing it together into a unified whole.

Now what happens if we isolate your eyes from one another and literally show each of them an entirely different picture? Will you see two things at once? No. This is where binocular rivalry comes in. As it turns out, your brain can only consciously represent one complete picture at a time, so when it is given two competing visual stimuli, it has to somehow choose which one to represent. At times it fixes on one image and ignores the other. Or, with the right sequence of images, it can be made to flip back and forth between the two. The key here in terms of consciousness is that regardless of which image is in consciousness at any given moment, the input into the visual centers in the brain is identical. The reason this is so exciting for Koch and his comrades is that, through the use of brain imaging techniques, it allows them to compare snapshots of the brain when a given perception is conscious and when it is not conscious. This, they hope, will ultimately give them some clues to understanding how neuronal activity correlates with consciousness.

> **"The hard problem is the question of how physical processes in the brain give rise to subjective experience."**
>
> *David Chalmers*

If this description leaves you wondering how this kind of research is really going to help us understand consciousness, it may well be that you already have an intuitive feel for what David Chalmers was referring to when he distinguished between the "hard problem" and the "easy problems" of consciousness. By Chalmers' definition, Koch's work, and that of the other panelists, is entirely concerned with one of the easy problems. No matter how clear a snapshot we can get of what type of neuronal activity correlates with which sorts of conscious perceptions, we will still be no closer to understanding how the brain could possibly *produce* something like conscious experience itself. As philosopher John Searle wrote in a recent review of Koch's latest book, *The Quest for Consciousness,* "The subjects on whom these experiments are performed are already conscious. . . . So the most we can reasonably expect from this research is an explanation of how, within a brain that is already conscious, we can cause this or that perceptual experience. . . . In my view we will not understand consciousness until we understand how the brain creates the conscious field to begin with."

During the question-and-answer session following Koch & co.'s presentation, the questions ranged from experimental technicalities to quantum physics to the paranormal. One woman asked Koch how his "neurobiological framework for consciousness" would account for near-death experiences in which patients are able to report on events that happened while their brains were not functioning. Koch's curt reply was, "If they're having an experience, there must be neural correlates. I'd need to see a double-blind study." As I was pondering just how one would go about recruiting volunteers for such a study, I made my way to the stage to introduce myself to Chalmers. Engrossed in the business of conference organizing, he paused for a brief chat—until he connected my name to the magazine I'd sent him before the conference. Obviously pegging me for someone on the "fringier" end of the spectrum, he asked: "How would you feel about moderating the panel on Nonlocal and Paranormal Effects? The person we had scheduled didn't show up."

Always up for a little stage time, I smiled. "Sure, when is it?"

"It starts in ten minutes."

"Do I need to know anything? I'm not really an expert in the paranormal."

"No, you'll be fine. Just get there in time to talk with the panelists beforehand."

LET A THOUSAND FLOWERS BLOOM

Compared to the auditorium-sized plenary session; the breakout room with seats for about a hundred and fifty felt almost cozy. By the time I had found my way through the maze of hallways, all of the panelists had arrived, as well as most of the audience. Catching my breath, I did the fastest four interviews of my life, thought up a few jokes about materialism for my opening comments, and proceeded to try to lay out some context for the session.

The first panelist was prominent paranormal, or psi, researcher, Gary Schwartz, whose book *The Afterlife Experiments* reports on a series of experiments done with spirit mediums that suggest strongly that whatever consciousness is, it seems to be able to survive physical death. Schwartz, who runs the Human Energy Systems Lab at the University of Arizona, delivered a robust talk in which he summarized this impressive body of research, and expressed his frustration with the mainstream scientific community's unwillingness to even consider what it might mean for our understanding of consciousness. He was followed by Katherine Creath, another researcher

from the UA psi lab, who presented evidence for intentional remote energy healing—of plants. Using biophoton imaging technology, Creath found that "energy healers" from three different disciplines were able to significantly increase biophoton emissions (a sign of health) in injured plants, simply by "treating" them with the intention to heal. After my joke about never eating salad again failed to rouse the expected laughs, we moved quickly on to a talk on remote viewing by a young student from Florida and a presentation of research by a German scientist showing that we can consciously "will" the nervous systems of others into a calm state, even at considerable distance.

Following the materialism of the opening panel, I found it something of a respite to spend a bit of time contemplating the mysteries of consciousness beyond the brain. Given the conference's clearly neuroscientific bent, I was surprised to find a session so far outside the scientific mainstream. Indeed, over the days that followed, I was intrigued to discover that, in addition to a plethora of sessions devoted to discussing the intricacies of the brain, there was also a wide range of presentations on topics that would generally be considered fringe. One well-attended session explored the current state of research on "meditation and consciousness." Another, entitled "Art and Consciousness," included a talk on the relationship between altered states of consciousness and "visionary art." Stanford's Stephen LaBerge gave a workshop on lucid dreaming. And one of the plenary sessions was even devoted to research on the effects of psychedelic drugs.

Perhaps not quite as fringe, but no less far out, were several presentations from the artificial intelligence crowd on the possibility of building conscious robots, and a surprising number of panels and papers on models employing quantum physics to explain the relationship between consciousness and the brain. Over lunch one afternoon at a nearby Mexican restaurant, I asked Chalmers how a serious academic conference had remained open to such a wide range of approaches. Pausing momentarily from his chicken burrito, he replied, "There is so much that we don't understand about this that it's always been our approach to 'let a thousand flowers bloom.' There's room here for everybody, precisely because we don't know where the answers are going to come from."

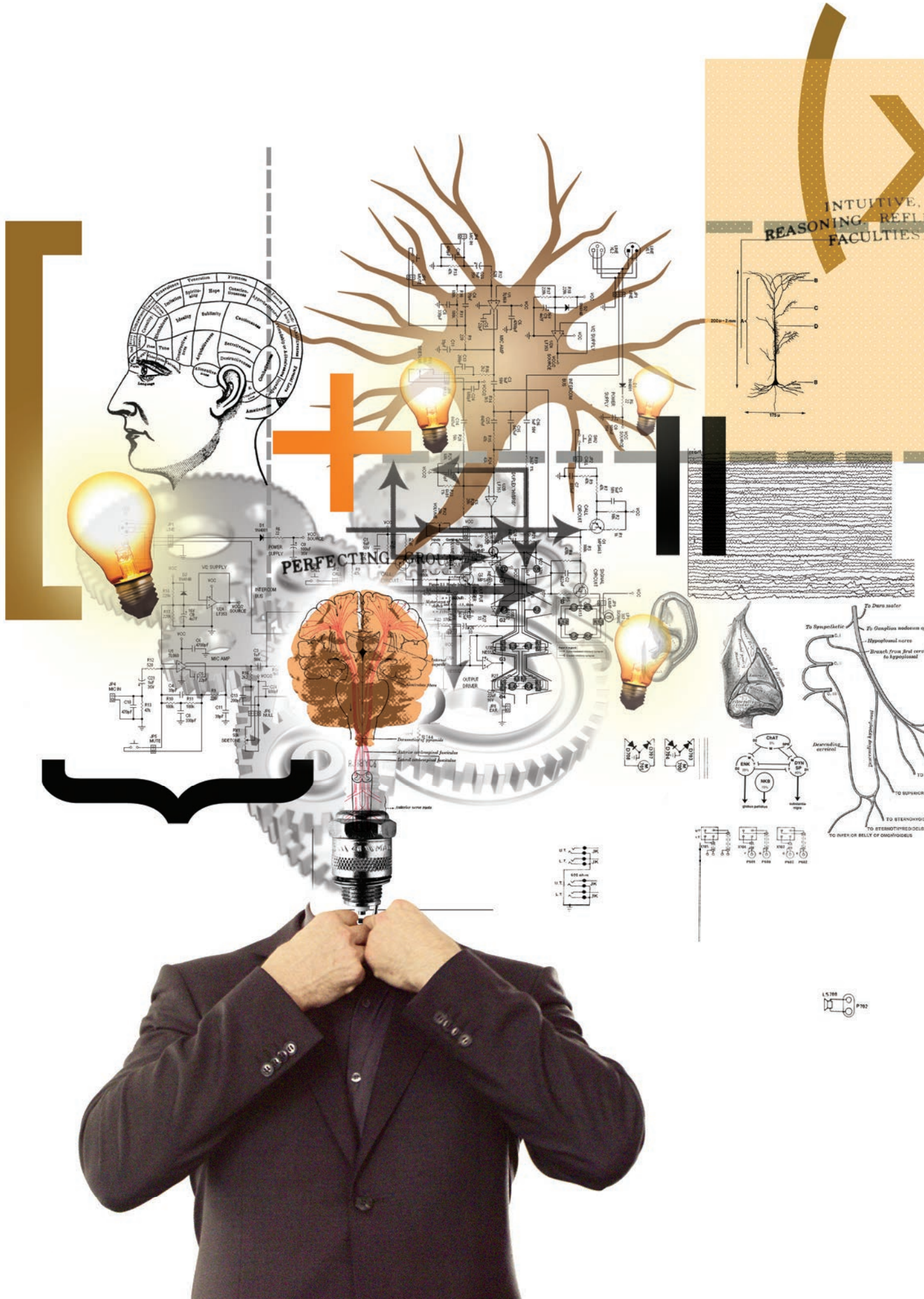
But despite the conference organizing committee's open-mindedness in embracing alternative thinking, it was nonetheless clear which camp is gaining the most ground. For although a thousand flowers may have been blooming in Tucson that spring, there was little doubt where the vast majority of them were rooted: in materialism and its fervent aspiration to reduce all human experience to the workings of the brain.

Indeed, though I had come to Tucson in full awareness of the conference's materialistic focus, as the week wore on, the larger implications of what it would actually mean to demonstrate the neurobiological basis of consciousness began to set in. And it is a disconcerting picture, to say the least. If consciousness is, in fact, created by the brain, it turns out, very little of our commonsense picture of reality is true. Over the course of the week, I learned several important things:

1) free will is an illusion
2) so is the self
3) consciousness sort of is, too, or at least, it doesn't do anything
4) even if we were to discover that we are living in the "Matrix," we should act as if it's real, and not worry about it. In other words, Neo took the wrong pill.

Having jumped in at the deep end, by the end of the conference, I was more or less thoroughly confused. In part, my confusion was conceptual. As a layperson, trying to listen in as professionals debate the finer points of brain science, AI, and philosophy of mind is not exactly an easy entry into the territory. I often found myself asking whoever was sitting next to me to translate what had just been said into "English." But I think the deeper source of my confusion was on a human level. Having someone look you in the eye and calmly tell you that they are "nothing but a complex of algorithms"—or worse, that they "have no conscious control over their actions"—is the kind of thing that makes you start scanning the room for a security guard. Over and over as the week wore on, I found myself wondering how it was that so many people could become so convinced of ideas that run so counter to our most basic experience of being alive. Given all the talk about artificial intelligence, I secretly began to suspect that, in fact, the speakers were all sophisticated robots programmed to try to convince us that we were too. I left the conference even more determined to understand the roots of this strange predicament, but I knew that before I could, I would have to figure out why it was that scientists are so sure that we are nothing but our brains.

I secretly began to suspect that in fact the speakers were all sophisticated robots programmed to try to convince us that we were too.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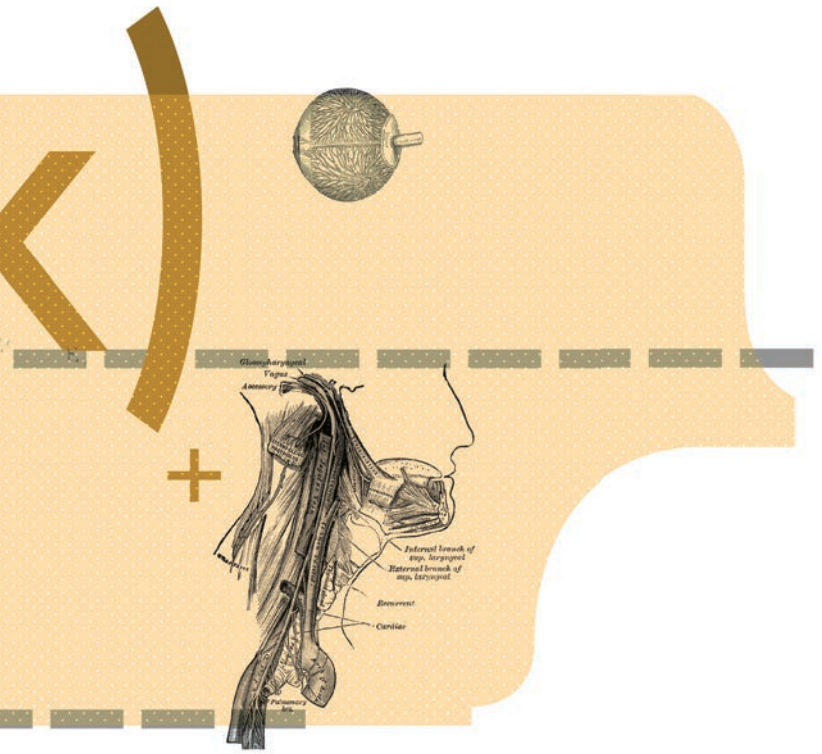


What if you could take a regular pill that would radically transform your personality, and even your sense of self, for the better?

PART TWO: steps to a biology of mind

A BRIEF HISTORY OF MIND

Fifteen years after President Bush senior inaugurated "The Decade of the Brain," it is hard to believe that until fairly recently in human history, the idea that the brain is even involved in mental life was a matter of considerable dispute. Indeed, the first thinker on record to suggest a link between mind and brain was the Pythagorean Alcmaeon of Croton, writing in the fifth century BCE. Prior to that, across cultures, it was widely held that the mind, or soul, was located in the heart. The priests of ancient Egypt, for example, when preparing the body of the deceased for the afterlife, would pull out the brain, piece by piece through the nose, but would leave the heart intact, believing it to be the center of a person's being and intelligence. In most ancient cultures, the idea of dissecting a cadaver was taboo, so with no knowledge of the nervous system, it was only natural to conclude that the accelerated heartbeat that accompanied an excited mind was a clear indication of the bodily location of mental life. Even such great thinkers as Aristotle subscribed to this view. But, rigorous biologist that he was, Greece's greatest polymath was certain that the brain must serve some function. Noticing that it was cool to the touch, he concluded that it refrigerated the blood—a conclusion that also allowed him to account for the inordinately large brains of humans. Because of our unusual intelligence, he argued, our hearts produced more heat and, thus, required a larger cooling system.

Alcmaeon's brain-centered theory, however, did manage to persuade the likes of Hippocrates and Plato to abandon the prevailing "cardiovascular theory," and despite Aristotle's resistance to the idea, it was picked up by physicians during the early Roman period who broke the taboo against dissecting cadavers and discovered the nervous system branching out from the skull and spine. Although this view gradually took hold, and has remained dominant ever since, it was still being disputed as late as the seventeenth century, when philosopher Henry More wrote, "This lax pith or marrow in man's head shows no more capacity for thought than a cake of suet or a bowl of curds." It is also worth noting that the model of the brain that prevailed through most of the second millennium was very different from the model we subscribe to today. Whereas we now see a vast, complex electrochemical network of some hundred billion neurons, these early anatomists were convinced that the mind, or soul, was a kind of etheric presence that lived in large "ventricles" or chambers in the brain, communicating its commands to the rest of the body through "vital spirits" that flowed through the nervous system's minute pathways.

Indeed, it has been this move away from a spirit-based view of the brain's workings toward a purely biological one that has led to the idea, so unpopular with the religiously inclined, that the mind, or soul, is ultimately reducible to brain activity.

LIKE A HOLE IN THE HEAD

The road to this now widely shared conviction has, like any scientific development, been marked by several major turning points. But few have struck the field with as much force as the story of a Vermont railroad worker named Phineas Gage. The year was 1848, and Gage was out supervising the construction of a section of track when an accidental explosion shot an iron rod more than three feet long and one and a quarter inches in diameter straight into his left cheek, through his frontal lobe and out through the top of his head, taking no small measure of brain with it. To everyone's amazement, Gage was back on his feet in a matter of minutes and appeared unfazed by the incident. In fact, according to the doctor who treated him an hour later, he was able to speak more lucidly about it than his shaken coworkers who had witnessed it. Although his basic cognitive functions remained unaltered, however, over time it became clear that something fundamental had changed. According to John Harlow, the physician who followed his case, where Gage had once been efficient, capable, and thoughtful, after the accident he became "fitful, irreverent, indulging at times in the grossest profanity, . . . manifesting but little deference for his fellows, impatient of restraint or advice when it conflicts with his desires." So radical was the shift in personality that, "his friends and acquaintances said he was 'no longer Gage.'"

At the time of the Gage incident, there was already considerable speculation that specific regions of the brain were responsible for specific aspects of perception, cognition, and behavior—particularly among the "phrenologists," who attempted to "map" the regions of the brain according to the lumps on the skull. But the reason Gage's case caused such a stir was that it seemed to suggest that there were even systems in the brain responsible for the creation of our personalities, our unique selves. In the century and a half since, studies of brain-damaged patients by clinical neurologists have revealed much about the relationship between the functioning of the brain and the way we experience and respond to the world. Their stories are often as perplexing as they are revealing.

Until fairly recently in human history, the idea that the brain is even involved in mental life was a matter of considerable dispute.

In his book *Phantoms in the Brain,* neurologist V.S. Ramachandran tells the story of a young patient named Arthur who, after suffering a severe head injury in a car accident, began to insist that his parents were impostors. No matter how hard they tried to convince him otherwise, whenever he would see them, he would say, "You may look like my real parents, but I know you're not my real parents." When they would call him on the phone, however, he immediately recognized them. This peculiar delusion, known as Capgras' syndrome, has been chronicled a number of times in psychiatric literature and has generally been given Freudian interpretations relating it to the notorious Oedipus complex. But Ramachandran had a different idea. His explanation was that a connection had been severed between one of the visual centers of the brain and one of the emotional centers. So despite the fact that Arthur could recognize his parents' faces, he didn't *feel* anything when he saw them. Though Arthur's father did manage to temporarily convince him of his authenticity (by apologizing for hiring the impostor parents), Arthur soon returned to his original delusion.

It is hard for most of us to imagine what it would be like to have one of our most taken-for-granted faculties suddenly no longer available to us, like the ability to respond emotionally to

our visual experience. Indeed, what is most intriguing about these stories is the way in which they challenge one of our most fundamental intuitions—our sense that the self is a single, unified whole. Repeated throughout the neurology literature are cases in which damage to a specific part of the brain leads to the loss of some specific aspect of our ability to perceive and respond to the world. Damage one part of my brain and I'll lose the ability to learn any new facts. Damage another part and I'll be unable to recognize faces. Damage another area and my experience of the world will remain intact, but I'll be unable to find the words I need to speak clearly about it. Damage still another part and I'll lose the ability to pay attention to half of my visual field, but I will be convinced that the half I'm seeing is the whole picture. As a result, in the morning, I'll only shave half of my face. Taken together, the data from neurology suggest that despite our brain's ability to organize our experience of ourselves and the world into a seamless unity, we are, in fact, made up of many parts, the loss of any of which can have dramatic effects on the whole.

BEING OF TWO MINDS

When we think of brain damage, we generally think of damage caused by accident or disease. But there is also the kind of damage intentionally inflicted by surgeons in order to help resolve a brain disorder. Given our increased understanding of the delicate interrelatedness of the entire brain, such procedures are rarely done these days, owing in some part to the often disastrous results of the 45,000 frontal lobotomies performed in the U.S. in the 1940s and '50s. But another procedure, performed in the 1960s as a means to eliminate epileptic seizures, yielded some surprising findings for our understanding of the brain's relationship to the self.

Stories from neurology challenge one of our most fundamental intuitions—our sense that we are a unified whole.

However ignorant we may be of brain science, most of us are familiar by now with the idea that our brain has two hemispheres, a left one and a right one, each responsible for very different aspects of our behavior. Our dominant left brain, we are told, is more analytical; our right brain more emotional, creative, and intuitive. Although much of the popular psychology literature on the right brain–left brain distinction has been, in the eyes of neuroscience, exceedingly simplistic and inaccurate, the basic fact—known in the field as "hemispheric specialization"—is well established. In a normal brain, these two hemispheres communicate with one another through a large band of nervous tissue known as the corpus callosum (larger in women than in men, incidentally, accounting for their superior ability to multitask, among other things). But what would happen if the connection between these two halves of the brain were severed, leaving us, in effect, with two brains in our head? Would we end up with two different selves? Over the past few decades, a group of neuroscientists have had the chance to find out.

Epilepsy comes in many forms, some mild and some severe. In its worst manifestations, it brings with it nearly constant seizures that make life almost impossible for the patient. In an attempt to control these severe cases, in the 1960s neurosurgeons began cutting the corpus callosum to prevent the seizures from spreading from one side of the brain to the other. The procedure was remarkably successful, and to the relief of the doctors who pioneered the treatment, patients generally recovered well and were able to live relatively normal lives. But in these "split-brain" patients, psychobiologist Roger Sperry soon recognized a rare opportunity to study the differences between the two hemispheres in a way that had never been possible before. Over the decades that followed, he pioneered a series of studies that ultimately earned him a Nobel Prize. Most of these split-brain studies focused on illuminating the functional differences between the two hemispheres, but along the way, Sperry and his colleagues began to realize that there were implications to what they were seeing that went far beyond the scope of their initial questions.

One of the most commonly known facts about hemispheric specialization is that the right brain controls the left side of the body and the left brain controls the right side. Where visual input is concerned, the same rule applies. The left half of the visual field (of each eye) is routed to the right brain and vice versa. Knowing this, researchers realized that by presenting information quickly to only one side of the subject's visual field, they could ensure that the information only reached one side of the subject's brain. This technique provided the cornerstone of their research.

Employing this method, researchers had learned early on that the dominant left brain, with its ability to reason and use language, is the home of what we usually think of as the conscious mind. For instance, when asked to report on information that had been presented to their left brain alone, sub-

jects could speak about it quite normally. When information had been presented only to the right brain, by contrast, subjects seemed unaware of it. As the research progressed, however, the picture grew more complex. For instance, when the right brain was shown an image of a spoon, the subject's left hand (which is controlled by the right brain) could successfully identify an actual spoon from among an assortment of objects, even though the subject claimed to have no conscious knowledge of having seen it. Despite its inability to express itself, the right brain nonetheless seemed to have a will and mind of its own. Eager to test this, Scottish neuroscientist Donald MacKay devised a twenty-questions-type guessing game and successfully taught each of the two halves of a patient's brain to play it—first against him and then against the other half. But this image of the two halves of one brain competing with one another soon moved from the experimental to the macabre, as split-brain patients began to develop the bizarre malady known as "alien-hand syndrome."

Imagine just having zipped up your trousers with your dominant right hand only to find your left hand unzipping them and taking them off.

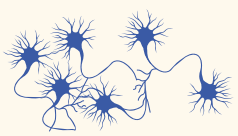
Imagine just having zipped up your trousers with your dominant right hand only to find your left hand unzipping them and taking them off. Or reaching to embrace a lover only to find your left hand punching her in the face. Or attempting to shop at the supermarket as your left hand grabs unwanted items from the shelves and shoves them in your pocket. If this sounds like a story straight out of *The Twilight Zone,* it is nonetheless exactly what a number of split-brain patients began to report. One patient said it regularly took her half a day to pack for a trip because each time she put an item in her suitcase with her right hand, her left hand would remove it. Another said that he was even afraid to go to sleep for fear that his left hand would strangle him.

As extreme as it sounds that each half of a brain could have its own agenda, this fact was eventually demonstrated experimentally by neuroscientists Michael Gazzaniga and Joseph LeDoux. Although in most of us, the dominant left brain houses all of our language capacity, in a small percentage of the population, the right brain also develops some linguistic functions. Using a rare case of a young split-brain patient whose right brain had developed a slight capacity for printed language, the researchers asked both halves of the brain a series of questions, and found that, particularly where preferences and opinions were concerned, there was often disagreement. What was most revealing, though, was when the patient was asked about his ambitions. In response to the question: "What do you want to do when you graduate?" his dominant left hemisphere answered, vocally, "I want to be a draftsman. I'm already training for it." His right hemisphere, which could only respond by using Scrabble letters to spell out its answer, responded "A-U-T-O-M-O-B-I-L-E R-A-C-E-[R]."

The idea that splitting the brain amounts to nothing less than splitting the self is a challenging one with enormous implications for our understanding of the brain's role in creating consciousness and even individuality. Therefore, it is no surprise that it has remained a controversial finding, even among scientists. But for the man who was awarded the Nobel Prize for his pioneering work in this area, the experience of working with split-brain patients for many years all pointed in one direction. "Everything we have seen indicates that the surgery has left these people with two separate minds," Sperry wrote. "That is, two separate spheres of consciousness."

THIS IS YOUR BRAIN ON DRUGS

One morning last summer, in the midst of my research, a longtime colleague and friend showed up at my office door looking a bit out of sorts.



THE INNERNET?

What is the most complex network yet developed? If you guessed the world wide web, guess again. The human brain, with its electrochemical matrix of over one hundred billion neurons, makes the internet look like a fancy spider's web. With each neuron linked to about 50,000 other neurons, that makes for a total of one hundred trillion connections.

"Something's really wrong with my dad," he said. "He's not himself."

Having spent time with my friend's father over the years, I was well aware of the twenty-year battle with Parkinson's disease that had slowly eroded the dexterity and agility of this successful trial lawyer and former athlete. And I had more than once seen the look, somewhere between pain and confusion, that engulfed my friend's face when the disease suddenly took a turn for the worse. But today there was something different.

"What do you mean?" I asked. "Is it the Parkinson's?"

"Sort of," he replied. "Somehow his medication has gotten out of whack. He's doing the most bizarre things. Late last night, my brother found him standing in the front yard with a water pistol in his hand. He was convinced that he was protecting the house from a gang of marauders."

"In Omaha?"

A smile momentarily broke his sobriety. "Yes. And when my brother found him, all he said was, 'It's about time you got here. I need some backup.'"

"How is he now?" I asked.

"They've got him in the hospital, and they're monitoring his medication, trying to figure out what went wrong. They have to keep him under constant supervision because whenever the nurse leaves the room, he tries to make a break for it." He paused for a moment. "It just seems so delicate. What does it mean that the person you thought you knew can change so dramatically simply because their brain chemistry changes? What does that say about who we are?"

The relationship between brain chemistry and consciousness is one that, in the neuroscience age, is hard to get away from. As neurobiologists have deepened our understanding of the powerful neurochemicals that underlie our moods and motivations, words like adrenaline, endorphins, dopamine, and serotonin have become part of our vernacular. And for those who have spent any time studying the field, it has become increasingly difficult not to think of human behavior in chemical terms. In his 2004 book *Mind Wide Open: Your Brain and the Neuroscience of Everyday Life,* journalist Steven Johnson sums up the prevailing view: "Our personalities—the entities that make us both unique and predictable as individuals—emerge out of these patterns of chemical release." Although part of the widespread confidence behind this view comes from observing cases like my friend's father, where a sudden chemical imbalance can cause a severe psychological disturbance, more of it has come from observations of the overwhelmingly positive transformations that attaining the right internal chemistry can bring about. Ever since the psychopharmacology revolution of the 1950s, when psychiatrists discovered the power of Thorazine to reduce even the worst symptoms of psychosis, the quest to chemically engineer mental health and well-being has been in full swing. Of course, most of us need look no further than our last trip to Starbucks or the local pub to see our own conviction in the benefits of chemically altered consciousness. But what if our power to chemically transform our experience went beyond a temporary release of inhibition or elevation of awareness? What if you could take a regular pill that would radically transform your personality, and even your sense of self, for the better? In the brave new world of psychopharmacology, even this bizarre possibility has become a reality.

For those who have spent any time studying the field, it has become increasingly difficult not to think of human behavior in chemical terms.

We all probably know Prozac as the first and still most popular of the new genre of antidepressant medications to have swept the civilized world over the past two decades. By inhibiting the cellular reuptake of serotonin, this magic pill has proven overwhelmingly successful in lifting the spirits not only of the clinically depressed but of anyone simply wishing to feel a bit "better than well." While this latter use, dubbed "cosmetic psychopharmacology" by psychiatrist Peter Kramer, raises many ethical issues and has been the subject of much heated debate, it is the results from Prozac's original clinical application that are of greatest interest here.

In his 1993 bestseller, *Listening to Prozac,* Kramer documents the cases of several patients who, after being prescribed the medication, experienced not only the expected elevation in mood but a wholesale transformation of their personalities. One such case was a woman named Tess who, in addition to being relieved from her depression, reported being simultaneously more at ease and more driven, less subject to emotional disturbance, and more extroverted, socially adept, and competent at her work. Two weeks after starting the medication, Kramer writes:

> *She looked different, at once more relaxed and energetic—more available—than I had seen her, as if the person hinted at*

in her eyes had taken over. She laughed more frequently, and the quality of her laughter was different, no longer measured but lively, even teasing.

With this new demeanor came a new social life, one that did not unfold slowly, as a result of a struggle to integrate disparate parts of the self, but seemed, rather, to appear instantly and full-blown.

"Three dates a weekend," Tess told me. "I must be wearing a sign on my forehead!"

This new personality remained consistent for nine months—until Kramer took her off the medication. Although Tess did initially manage to hold on to some of her newfound confidence, she gradually began falling back into the personality traits that had characterized her life before Prozac. "I'm not myself," she told Kramer after several months, at which point he promptly put her back on the medication.

Another patient, Julia, had experienced a similar transformation, following a stunning reversal of the obsessive-compulsive behavior that had been ravaging her family and work life. But when Kramer tried to lower the dose:

Two weeks later Julia called to say the bottom had fallen out: "I'm a witch again." She felt lousy—pessimistic, angry, demanding. She was up half the night cleaning. . . . "It's not just my imagination," she insisted, and then she used the very words Tess had used: "I don't feel myself."

In reflecting on Kramer's accounts, Walter Truett Anderson writes in *The Future of the Self,* "What is particularly fascinating here is that in both cases, the women believed their 'real selves' to be what they had experienced during the short period of treatment and not the way they had been for the rest of their lives. Which, then, is the real self? And who decides?" Kramer himself, perhaps the single greatest advocate of cosmetic psychopharmacology, also found it hard to come to terms with this particular outcome of the treatment. "How were we to reconcile what Prozac did for Tess with our notion of the continuous, autobiographical human self?" These are big questions. And in light of the present inquiry, I would add one more: If a simple shift in brain chemistry can bring about such a dramatic transformation of the self, what aspects of our selves, or souls, do we imagine are outside the control of the brain? Like the study of brain damage, psychopharmacology also seems to suggest that we are more a product of our brains than most of us would like to think.

NEUROETHICS

If the study of brain damage and neurochemistry provides the beginnings of an outline of the profound link between brain and mind, powerful new brain scanning techniques promise to fill out the details in living color. By providing a picture of the brain's blood-flow patterns when engaged in particular activities, PET, SPECT, and fMRI scans are enabling researchers to map the regions of the brain like cartographers once charted the contours of the globe.

Through extensive imaging studies, neuroscientists have been able to identify nearly a dozen areas involved in different aspects of speech alone. And that pales in comparison to the thirty-plus different areas involved in specific aspects of vision. There is one area that recognizes vertical lines, another for horizontal lines, another for detecting motion, and another for the color blue. When it comes to face recognition, the picture gets even more complex. Would you believe that there are specific clusters of neurons that light up when presented with specific faces at specific angles—that, for instance, there is one tiny part of your brain dedicated specifically to your grandmother's profile, and another reserved for the ubiquitous mug of George Bush?

Discovering the biological basis of speech and perception is, however, just the beginning. With experimental methodologies improving by the month, even the more complex aspects of our experience, such as emotion, reason, motivation, and will, are beginning to give up their secrets. In *Mapping the Mind,* science journalist Rita Carter writes: "It is now possible to locate and observe the mechanics of rage, violence, and misperception, and even to detect the physical signs of complex qualities of mind like kindness, humour, heartlessness, gregariousness, altruism, mother-love, and self-awareness."

There is one tiny part of your brain dedicated specifically to your grandmother's profile, and another reserved for the ubiquitous mug of George Bush.

The profound implications of these findings are not lost on the neuroscience community. Indeed, one of the more interesting new areas of discussion is what has become known as neuroethics. According to psychologist Martha Farah, brain imaging in particular has opened up an ethical can of worms with its unprecedented ability to peer into the previously private

reaches of the individual mind. For instance, with neuroimaging, it has now become possible to tell when someone is being deceitful, or even when they are deceiving themselves. Enter lie-detection 3.0. Scientists can also discern whether someone was involved in a crime by showing them objects from the crime scene and seeing how their brain responds. Welcome to the new forensics, as marketed by Brain Fingerprinting Laboratories, Inc. It's even possible to tell whether someone is an illegal drug user by showing them photos of drug paraphernalia and seeing whether the brain enters a "craving state." Meet the new war on drugs.

Then there is what Farah refers to as "brainotyping." Using these same methodologies, neuroscientists can now look behind the scenes of your persona and find out what sort of human being you really are. Do you secretly harbor racial prejudices? By watching your brain while you look at pictures of racially diverse faces, brain scanners can provide an answer. How about sexual preferences? By showing you a variety of erotic imagery, we can see who or what turns you (or your brain) on. (And don't bother trying to suppress your response. Your brain looks different when you do that too.) Are you a risk-taker? A pessimist? An introvert? Neurotic? Persistent? Empathic? Even such core personality traits as these are now laid bare before the new neurointerrogation.

Ethical issues indeed.

Within the discussion around neuroethics, however, there is a larger issue coming to the fore that some feel may rattle the very foundations of the way we think about ethics itself. In civilized culture, our ethical norms and even our legal system are built on the notion of individual responsibility. When judging the actions of another, we hold him or her accountable for having freely chosen those actions for good or ill. But if we look at the picture of the human being emerging from neuroscience, many feel that there is little in it to support the idea that we freely choose our actions. If our actions are entirely caused by the brain, and the brain is in turn shaped entirely by the interaction between genes and environment, where does free will enter the equation? This may seem like philosophical nonsense, given that one of our most basic human intuitions is our sense of our own freedom to choose. But prominent neuroscientists claim that this deterministic picture of human behavior has, in fact, been reinforced by a number of experiments that seem to show that our brain makes choices before we are conscious of having made them, that in fact, conscious will is an illusion.

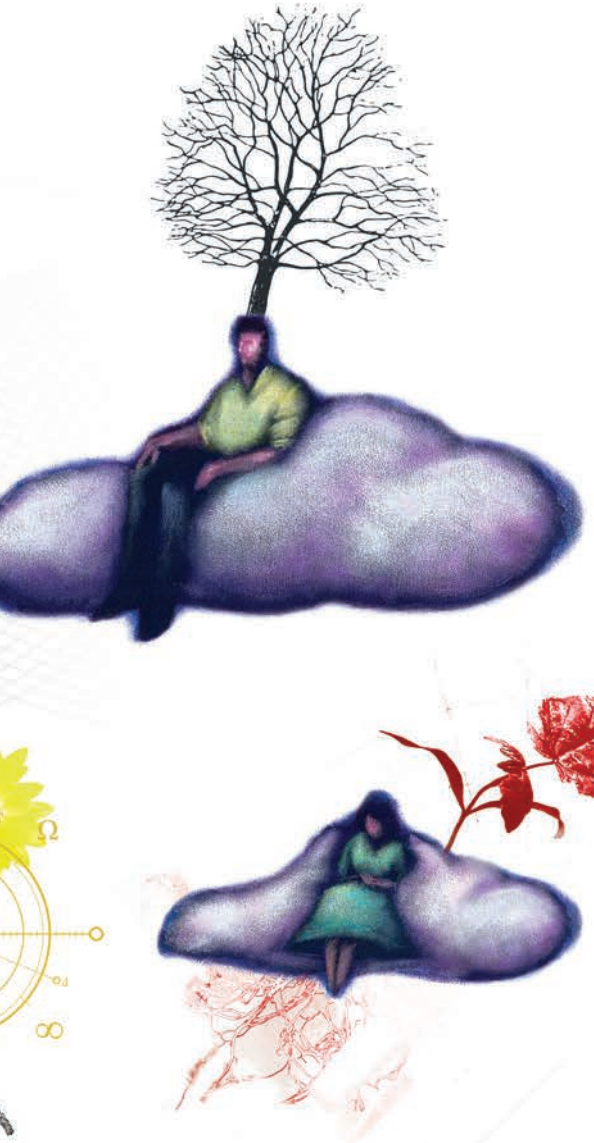
Neuroscientists can now discern whether someone was involved in a crime by showing them objects from the crime scene and seeing how their brain responds.

This bizarre notion, which is widely held within the neuroscience community, is clearly not one that will go over easily with the public at large. In fact, on the controversy scale, it may run a close second to what is no doubt going to be the most hotly disputed neuroscience claim of all—the notion that, as Farah puts it, even our "sense of spirituality" is itself a "physical function of the brain."

TODDLER RECALL

Childhood memories may last a lifetime, but try remembering something that happened before the age of three and you'll either draw a blank or be drawing on your imagination. What's the source of this memory barrier? Could it be repression, our ego's attempt to shield us from the trauma of the terrible twos? Not likely. As it turns out, the hippocampus, the part of the brain responsible for long-term memory, doesn't mature until around the age of four.


足陽明胃經之圖



"Our inability to account for consciousness is the trigger that will, in time, push Western science into what the American philosopher Thomas Kuhn called a "paradigm shift."

Peter Russell

PART THREE: the quest for a new paradigm

IS GOD ALL IN YOUR HEAD?

As my train surfaced just west of Penn Station, the light snow that had been with me since I left Massachusetts early that morning seemed to have picked up the pace. Settling in for the last two hours of my journey to Philadelphia, I pulled out the new issue of *Time* I had picked up at the newsstand. It was a "special Mind and Body issue" on "The Science of Happiness," and as I started flipping through it, I almost immediately landed on a two-page spread featuring a large color photo of a meditating Buddhist monk with electrodes attached to his head. Fixing the electrodes to his shaven scalp was psychiatrist Richard Davidson, the "king of happiness research," who observes the brain activity of meditators in an effort to understand the connection between meditative bliss and our prefrontal lobes. The article, entitled "The Biology of Joy," was only the latest in a series of reports that have hit the popular press in recent years documenting the efforts of neuroscientists to understand the relationship between spiritual experience and the brain. The first, and certainly most memorable, was a *Newsweek* cover story in May of 2001: "God and the Brain: How We're Wired for Spirituality." It was in that article that I first learned about the work of the man I was now on my way to Philadelphia to meet, the renowned meditation researcher Andrew Newberg.

A radiologist at the University of Pennsylvania Medical Center, Newberg earned his fame by conducting brain imaging studies on meditators in the late nineties. His findings, published in two books, *The Mystical Mind* and *Why God Won't Go Away* (cowritten with his research partner, the late Eugene D'Aquili), were some of the first to capture on film the distinct changes that occur in the brain during spiritual experience. Since that time, he has made the rounds of the progressive talk show circuit, been featured in nearly every relevant magazine, been inundated with speaking requests from churches and medical schools alike, and appeared in the recent science-meets-spirit cult film *What the Bleep Do We Know!?*—all of which points to just how much public interest (or

fear) there is regarding the possibility that even spirituality may have its roots in our cranium.

After meeting me in the hospital lobby and escorting me through a labyrinth of hallways to a small windowless office in the radiology department, Newberg turned his computer monitor toward me and said, "This is what I wanted to show you." On the screen were two colorful images of what I assumed was a human brain. "The picture on the left," he explained, "is the image of the subject's brain before meditation. On the right is what it looks like during meditation. In this case, the meditator was a Tibetan Buddhist, or, rather, an American Buddhist practicing a Tibetan form of meditation."

In their initial studies, Newberg and D'Aquili worked with two main groups, one comprising eight American Buddhists doing a concentrative form of meditation and another made up of three Franciscan nuns practicing contemplative prayer. Although the results of their studies varied somewhat between the two groups, the overall picture was remarkably consistent. Not surprisingly, Newberg and D'Aquili found that during meditation or prayer, there was an increase in activity in the prefrontal lobes, a region responsible for such higher faculties as intention, will, and the ability to focus our attention. But it was another one of their findings, in particular, that seemed to create all the stir.

"If you look here at this area at the back of the brain," Newberg said, pointing with his pen to a bright yellow blob of color, "you can see that it is much less pronounced during the meditation session than before. This is the posterior parietal lobe, what I call the orientation-association area. It's the part of the brain that allows us to orient ourselves in space, that gives us a sense of boundary between ourselves and the rest of the world. What we hypothesized was that the sense of unity, or oneness, that people experience during meditative practice would be correlated with a reduction of activity in this area. And this is exactly what the neuroimaging shows."

Hearing that the exalted mystical experience of oneness (what Newberg calls "absolute unitary being") comes about through the reduction of activity in a specific part of the brain is the sort of thing that could, as they say, take all the fun out of it, and fast. So far, though, Newberg seemed too good-hearted to be angling for the ultimate reductionist coup. To make sure, I hit him with my big question straight up: "Do you think your research shows that religious experience is completely reducible to brain activity? Is God all in my head?"

By his expression, I could tell he was ready for this one. "It might seem that way," he began, "but I don't think the research necessarily points to that conclusion. This may be a simplistic way of looking at it, but if I were to take a brain scan of somebody who is looking at a piece of apple pie, I can tell you what their brain is doing when they have the experience of seeing that apple pie. But I can't tell you whether or not that piece of apple pie exists in reality based on the scan. Likewise, if I take a brain scan of a Franciscan nun who has the experience of being in the presence of God, I can tell you what her brain is doing during the experience but I can't tell you whether or not God was really there, whether the experience represented a true reality. Neuroscience can't answer that epistemological question."

> **"When people have mystical experiences, they universally report that they have experienced something that is *more real* than our everyday material reality."**
>
> *Andrew Newberg*

As Newberg spoke further about epistemology—the study of how we know what we know—it became clear that for him, coming to grips with the philosophical and spiritual implications of his findings is at least as important as the findings themselves. "Let's say we were to take the materialist position that the only way we experience anything is through the brain. This means that the only way we can tell whether something is real is through our brain. The brain is the organ that discerns what is real. Okay, now this presents a slight problem for the materialist position because when people have mystical experiences, they universally report that they have experienced something that is *more real* than our everyday material reality. Which means that the brain perceives God, or pure consciousness, to be more real than anything else. So if the brain is what determines what is real and what isn't, and this is a universal experience of human brains across cultures, where does that leave us?"

In the course of our conversation, Newberg went to great lengths to make it clear that he is, in many ways, still agnostic on the big questions. But he also didn't hide the fact that the work he is doing is only the latest incarnation of a spiritual search that began in his youth—a fact that may account for his surprisingly nonmaterialistic interpretation of his own research. Although he acknowledged that his findings could easily be used to support a reductionist position, he feels that by experimentally demonstrating the reality of mystical experience, he is actually doing spirituality a service, perhaps even forcing science to take mysticism seriously for the first time. Indeed, what probably intrigued

me most about Newberg was his conviction that mystical experience itself may have something to offer science that it desperately needs—the possibility of breaking the bounds of subjectivity and opening the door to a truly objective perspective.

"One of the limitations of science is the problem of subjective awareness," he said at one point while giving me a tour of the scanning equipment used to conduct the research on the meditators. "Even with regard to our scientific studies and scientific measurements, science still has the problem of never really being able to get outside of our brain to *truly* know what is out there in reality. One of the reasons I've been so intrigued with spiritual experience is that it's the only state where one at least hears a description where a person claims to have broken the bounds of their own human self-consciousness and gotten into intimate contact with ultimate reality. And I think if that's the case, then as scientists, we have to look at that experience very, very carefully because that may be the only way of solving the problem of getting outside of the subjective mind."

As he escorted me back out to the hospital lobby, I told Newberg more about the questions that had sparked my own recent inquiry into brain science. To my surprise, he said he wasn't particularly troubled by the mind/body problem or by the mounting neuroscientific evidence for materialism. "The belief that matter is primary provides a good basis for explaining the material world," he said, "but it can give no clear answer as to where consciousness comes from. On the other hand, if we take a religious perspective and say that consciousness is primary, it's not so easy to explain the existence of matter. My own feeling is that perhaps consciousness and matter are two ways of looking at the same thing. But I think the bottom line is that we really don't know yet."

My encounter with Newberg opened my mind in ways I hadn't expected. Whereas I had gone to him bracing myself for yet another piece of seemingly irrefutable evidence for the brain as the sole source of experience, I left with some new perspectives on the terrain and with a renewed confidence that our humanity can withstand the challenges of brain science. As a

reputable neuroscientist, clearly Newberg was familiar with all the data I had come across, and no doubt a lot more. The fact that his own spiritual convictions hadn't been fazed and had even been bolstered by his studies of the brain seemed to suggest that there must be more to the story than the neuroscientific mainstream would have us believe.

As he reminded me, for all the evidence neuroscience seems to present for the case that the brain creates the mind, the reality is that nobody has yet been able to explain, let alone demonstrate, how it could actually do such a thing. The mind/body problem is as enigmatic as ever. And although this doesn't seem to be persuading the neuroscientific community at large to question its materialistic assumptions, as I would learn over the months that followed, there are a number of scientists on whom the implications of this fact have not been lost.

Emerging from the frontiers of a variety of scientific fields, there is a growing movement of pioneers who are seeking to counter the reductionist tendency in biology in general, and in brain science in particular. Convinced that the real problem of consciousness lies in the very way it is being approached, these new thinkers aim to root out the materialistic assumptions that are guiding the bulk of neuroscientific inquiry and replace them with a larger, more holistic paradigm capable of embracing the full complexity of human experience. Some are doing so by weaving elaborate alternative theories to account for the same data. Others are pushing the scientific edge with their own experiments attempting to demonstrate the existence of phenomena that cannot be accounted for by materialism. What they all have in common is a passion for preserving our humanity in the face of the mechanistic worldview, and a willingness to fiercely critique the dogmatic tendencies of scientific orthodoxy.

For all the evidence neuroscience seems to present for the case that the brain creates the mind, nobody has yet been able to explain how it could actually do such a thing.

INTO THE LIGHT

Perhaps the most intriguing challenge to the neuroscientific mainstream is emerging from the growing body of research into what physician Raymond Moody dubbed "near-death experiences," or NDEs. Throughout the ages and across cultures, people have reported a variety of mystical phenomena surrounding the dying process. But with the technological explosion of the twentieth century, one medical advance in particular has opened a significant window into the phenomenology of dying—namely, our ability to resuscitate people, to bring them back from the dead. Beginning with Moody's work in the early seventies, over the past several decades, a number of researchers have been exploring this terrain, yielding a remarkably consistent picture of what happens when people make a temporary sojourn through death's door.

Thanks to Oprah and other mass media coverage of the phenomenon, most of us are by now familiar with the basic outline. Upon being pronounced dead, these patients experience themselves outside of the body witnessing the scene of the accident or operating room from above. From there, at some point they begin moving into darkness, or sometimes a dark tunnel, at the other end of which they are met by deceased relatives and perhaps a "being of light" who then prompts them to undertake a review of their life. In most cases, there is an encounter with "the light," which is usually accompanied by feelings of overwhelming joy, love, and peace, after which they either discover or decide that it is not their time to die and are returned to their body. Although not all NDEs contain all of the above elements (in fact, some patients even report harrowing encounters with hellish realms, quite the opposite of the more common positive NDE), for most who have the experience, it is a life-transforming event, leading to a radical change in values and a loss of the fear of death.

It's easy to understand why these experiences would have such a profound psychological and spiritual impact. After an episode like that, who could doubt the existence of consciousness beyond the body and the reality of life after death? Indeed, given the widespread media attention these accounts have received, it may well be that NDEs are as responsible as televangelism for the continued widespread belief in the afterlife in contemporary America. And if we take them seriously, they certainly seem like good reason to question the notion that consciousness resides entirely in the brain. However, as neuropsychiatrist and renowned near-death researcher Peter Fenwick points out, "The simple fact that people have these experiences does not in itself prove anything one way or the other regarding the existence of consciousness outside the brain." Simply put, how do we know the NDE is not just a brain-generated illusion? According to the "dying brain hypothesis" as put forward by psychologist Susan Blackmore, all of the specific phenomena associated with the classic NDE can be accounted for by established brain responses to the "severe stress, extreme fear, and cerebral anoxia" that would naturally accompany a brush with death.

Yet riddled throughout the NDE literature are accounts that seem to suggest that there is more going on in these experiences than can as yet fit into the materialist picture. For instance, several physicians and nurses have reported patients being able to describe in detail events that happened when they were clearly unconscious, comatose, or even clinically brain dead. In one widely reported case, a postoperative patient correctly identified the nurse who had removed his dentures and the drawer she had placed them in—while he was in a coma. In another, an unconscious patient had an out-of-body experience after which she accurately described a tennis shoe she had seen on the outside ledge of a third-floor hospital window. But the most dramatic case to date is probably the now-famous story of an Arizona woman named Pam Reynolds. In a last-ditch attempt to save Reynolds from a brain aneurysm that threatened her life, doctors performed a rare and dangerous "standstill" operation in which they lowered her body temperature to below sixty degrees Fahrenheit, stopped her heart and respiration, and drained all the blood from her body and brain. Her EEG was a flat line, and her brain stem showed no response to the "clickers" placed in her ears. She was, by any reasonable definition, dead. Yet following her recovery from the operation, doctors learned that not only had she undergone a classic NDE, but she was also able to recount with astonishing accuracy many of the details of the operation, from the surgical instruments used to the conversation between the surgeons and nurses.

For most who have the near-death experience, it is a life-transforming event, leading to a radical change in values, and a loss of the fear of death.

So far, the research into NDEs has been largely anecdotal, and as yet, no one has provided the kind of independent verification of data that would stand as scientific proof. But it is anecdotal cases like these that have inspired researchers to focus their inquiry on documenting with increasing rigor those NDEs that could provide hard evidence that something more than the brain is at work. In the cardiac ward, where death regularly comes and goes, they have found their laboratory. As Peter Fenwick puts it,

> *For the scientific researcher, the interesting question is this: When does the NDE occur? . . . If it could be shown scientifically that the near-death experience occurs during unconsciousness, as suggested by those who have survived a cardiac arrest, when all brain function has ceased and there is apparently no mechanism to mediate it, this would be highly significant, because it would suggest that consciousness can indeed exist independently of a functioning brain.*

Fenwick and other NDE researchers agree that further research is required before the case can be closed with any certainty. But initial results from several large, multihospital cardiac ward studies are highly supportive of the notion of a nonmaterial mind. If future studies are able to provide adequate empirical evidence, it will indeed raise some very big questions about consciousness and the brain.

A MIND FIELD

If the mind is not contained in the brain, then just where exactly is it? The traditional dualist answer, around since Descartes' time, is that it is a separate immaterial substance that interacts with the brain and body in some mysterious way. Trying to figure out how this interaction occurs is what launched the debate over the mind/body problem in the first place. But today, thanks to advances in scientific theory over the past century and a half, some new ways of thinking about the matter are starting to emerge.

For renegade biologists like Rupert Sheldrake, one of the most powerful tools for understanding the workings of life and mind is the physical notion of the "field," first introduced to science by Michael Faraday in the nineteenth century. "From electromagnetic fields to gravitational fields to quantum matter

YOUR BRAIN ON BUDDHISM

Most neuroscientists are convinced that the brain creates the mind, but according to neuropsychiatrist Jeffrey Schwartz, there is increasing evidence to suggest that the mind also helps create the brain. Using basic Buddhist mindfulness techniques to effortfully focus their attention, obsessive-compulsive patients have been able to literally rewire their brain circuits to support new, healthy responses to once-troublesome stimuli.

fields, these field theories have taken over physics in such a way that everything is now seen as energy within fields," Sheldrake told me one afternoon at his home in north London. "As the philosopher of science Sir Karl Popper put it, 'Through modern physics, materialism has transcended itself, because matter is no longer the fundamental explanatory principle. Fields and energy are.' So what I'm asking is, When we come to the mind and the brain, what if the brain is a system that's organized by fields as well?"

According to Sheldrake, consciousness, or mind, is best understood as an information field that is anchored in the brain but extends far beyond it, that in fact, extends wherever our attention goes. "The field of a magnet isn't confined to the inside of a magnet. It stretches out beyond its surface. The field of a cell phone stretches out beyond the surface of the handset. So my point is that the fields on which mental activity depend interact with the brain and are rooted in the brain, but they're not confined to the brain any more than any of these other fields are confined to the material object they're associated with."

Approaching the mind/body problem in this way, Sheldrake feels, allows for an explanation of both the voluminous body of data that shows the dependence of consciousness on brain function and the mysterious evidence from his own studies of telepathy and other psi phenomena that seem to point to the ability of consciousness to reach beyond the parameters of the skull. "So, just as the field around the cell phone will be changed if you oblate a component or cut a wire in the handset, so the fields around the brain and the fields within the brain would be affected by changes in or damage to the physical components. But that doesn't prove that those fields are entirely limited to what's happening inside the brain."

According to Sheldrake, consciousness or mind is best understood as an information field that is anchored in the brain but extends far beyond it.

Indeed, in the course of my research, the most common metaphor I encountered among those seeking to counter materialism's robust claims was a notion first put forward by William James: the analogy of the brain as a kind of receiver/transmitter for consciousness. In Sheldrake's words:

> *If I switch on my TV set to PBS and if you measure different bits of the tuning set, you'll find that certain bits are resonating at certain frequencies. If I switch it to another channel, like Fox News, there will be measurable frequency changes in the various bits of the TV. But that doesn't prove that all the content of PBS programs and Fox News is generated inside that bit of the TV set. I think that the thinking behind a lot of neuroscience claims is as naïve as that, because it's based on the assumption that it's all inside the brain. Therefore the next question is: Which bits of the brain explain it? But if the brain is not like that, if the brain is more like a tuning system and a center for coordinating our actions and our sensations, then there's no reason to assume that all our mental activity is confined to the inside of the head.*

How exactly would such a receiver/transmitter model work in the case of the NDE, when the patient shows no brain activity at all? One idea, expressed by Dutch cardiac surgeon and NDE researcher Pim van Lommel is that "the informational fields of consciousness and memory are present around us as electrical and/or magnetic fields, but these fields only become available to our waking consciousness through our functioning brain and other cells of our body." According to van Lommel, when brain function is lost, these information fields continue to exist. Hence, brain-dead patients can still experience identity, attention, cognition, memory, and emotion. But these experiences will be brought into our waking consciousness only when brain function is restored.

Admittedly, such ideas, like those of other researchers on the frontiers of science, are far from being accepted by the academic mainstream. In fact, in speaking with Sheldrake, it became clear that he gave up trying to directly convince the scientific orthodoxy of his ideas a long time ago and is instead focusing his efforts on igniting a sort of parapsychology revolution among the masses. Through his recent popular books *The Sense of Being Stared At* and *Dogs That Know When Their Owners Are Coming Home* and his new participate-at-home email telepathy experiments, he is trying to awaken in the public an interest in exploring the mysteries of consciousness that surround them every day. His hope is that with enough popular support for the idea of psychic phenomena, the scientific establishment will have to start to take seriously the powerful evidence that he claims has been accumulating in parapsychology labs for decades.

THE UNIVERSE INSIDE YOUR HEAD

"Evidence is not the issue," the voice on the other end of the line said calmly. "We have plenty of evidence. But evidence alone is not enough. What we need now is a theory." I was speaking with

Dean Radin, senior scientist at the Institute of Noetic Sciences (IONS) and one of the leading voices in parapsychology, or "psi research," today. Having begun his parapsychology career in the mid-eighties doing government-classified research at SRI International (formerly part of Stanford University), Radin has worked in psi labs at a number of universities and spent several years as president of the Parapsychological Association. He is perhaps best known for his 1997 book *The Conscious Universe: The Scientific Truth of Psychic Phenomena*. In it, he presents an accessible and comprehensive overview of all psi research to date, including several meta-analyses of data from multiple studies that, taken together, make a persuasive case for the reality of such effects as psychokinesis, remote viewing, clairvoyance, telepathy, and distant healing—all of which seem to lend some support to the idea that the mind cannot be entirely contained within the brain.

In studies of psychokinesis, or "mind-matter interaction," for instance, researchers have found over thousands of trials that subjects can influence the output of electronic random-number generators to a statistically significant degree simply through the power of intention. "Remote viewing" research, much of it funded by federal agencies including the CIA, has shown that skilled psychics can accurately describe remote locations in controlled tests with odds against chance of over a billion to one. And despite recent controversies that have erupted around the field of "distant healing," studies suggest that "intercessory prayer" on behalf of others who don't know they're being prayed for can reduce secondary infection rates and hospital stays among AIDS patients, reduce the risk of complications during heart surgery, and even improve pregnancy rates for in vitro fertilization (results no doubt responsible for the 2.3 million dollars spent by the U.S. government on prayer research in recent years).

Psi research, like most frontier or "fringe" sciences, has been fiercely attacked by skeptics claiming research design flaws, inadequate samples, and experimenter bias. So I was curious to ask Radin what body of research he felt made the most irrefutable case for the existence of psi. While he was

quick to point out that "nothing in science is irrefutable," for the most convincing single body of data, he soon landed on the phenomenon of telepathy. Most of us have at some point been surprised to find ourselves seemingly picking up on another's thoughts, or knowing who was calling before we picked up the phone, or in this internet age, preparing to send someone a question via email only to receive their response before we sent it. While skeptics readily reduce all such phenomena to chance, a substantial body of research has been accumulating that aims to show just how far beyond chance they actually are.

The most potent evidence to date, according to Radin, surrounds what are known as "the ganzfeld experiments." Hypothesizing that reduced sensory input would place subjects in a more receptive state, in the 1970s researchers developed a basic, easily replicable experiment in which one subject, a "sender," views a single image for a period of time and attempts to send it telepathically to another subject, a "receiver," who has been "prepared" by spending ten to twenty minutes in a state of sensory deprivation. After this, the receiver is then shown a series of four images and attempts to identify the sent image from among them. If chance were the only factor involved, this would predictably lead, upon multiple trials, to a twenty-five percent success rate. But in the thirty years since its inception, this experiment has been replicated in over thirty-one hundred sessions across dozens of laboratories, producing an average success rate of thirty-two percent. For those not familiar with statistics, that might sound only mildly interesting. By the standards of science, however, it is nothing short of astonishing, showing odds against chance of over a trillion to one. "The magnitude of the effect is small, but it's stronger than the experiments that convinced the medical establishment that aspirin reduces the risk of heart attacks," Radin explained. "And telepathy is only one of many areas of successful psi research. This is why I'm saying that no amount of evidence alone is going to be enough. The implications for the current scientific paradigm are just too great."

For Radin, who has been battling skeptics for over twenty years, the accumulation of more data has, at this point, become a side issue. "This evidence, evaluated by the same standards as used in the behavioral, social, and medical sciences, establishes that psi effects are real," he explained. "The only reason that it's not accepted by the mainstream is that there is no clear, theoretical reason to accept it. It's not accepted because people don't know how to explain it."

> **"The only reason psi is not accepted by the mainstream is that people don't know how to explain it."**
> *Dean Radin*

When I spoke with Radin last winter, he was hard at work on his next book, *Entangled Minds,* in which, in addition to updating the results of psi research over the past seven years, he plans to present a new theory that he hopes will open the door for the scientific establishment to begin to take psi seriously. Like many theorists attempting to explain the unexplainable, he is looking to the mysterious world of quantum physics for answers. "Ultimately the mystery in psi is a mystery about physics," Radin told me. "The mystery is that something somehow got inside your head that didn't come through the ordinary senses, and that transcends time and space in some strange way. That mystery is about physics. It's not about biology, and it's not about psychology or neuroscience."

Drawing on the well-established idea of "quantum entanglement," Radin is proposing the existence of what he calls "bioentanglement." In a nutshell, quantum entanglement is the notion that seemingly separate subatomic particles, once they've been in contact with one another, will, in fact, remain connected even across space and time. This connectedness, or "nonlocality," was first demonstrated experimentally in 1972, and in the three decades since, Radin explains, physicists have been learning more and more about how widespread the phenomenon is. "It is far more pervasive and robust than anyone had imagined even a few years ago. And for me, the question is: What does that mean about the fabric of the world that we live in? What I think it means is that if in fact things are entangled, and if all that is required for two things to become entangled is some contact at some point in their history, then everything in our universe ought to be entangled, because cosmologists tell us that it all came from one source, the big bang."

Extending this idea of quantum entanglement out of the subatomic and into the "macro" realm is a controversial move, and one that, so far, most mainstream physicists are not yet ready to make. But for Radin, the notion of bioentanglement may provide a way of understanding phenomena that seem impossible to explain within a classical materialist worldview:

> *If brains behave as quantum objects, then it opens the possibility that our brains are connected, or entangled, with everything. In which case we can think of psychic phenomena not as a mysterious process of information being sent*

from one place to another and somehow getting into your head, but more as a change of attention within the brain. If the whole universe is already inside your head because you're bioentangled with it, then if you wish to see what is in somebody else's head or what's in a hidden envelope somewhere else, or what's on the other side of the world right now or last year, you simply need to attend to the portion of your brain that is entangled with that state.

THE VIEW FROM ABOVE

In their quest to counter the reductionist tendencies of materialism, frontier scientists like Radin and Sheldrake are by no means fighting a solitary battle. In recent years, philosophers, theologians, cosmologists, and even mainstream cognitive scientists have joined the fray, developing powerful critiques and alternative theories that attempt to expand the frame of our thinking about the mind and brain.

Philosophically speaking, one of the more intriguing ways around materialism—and indeed around the mind/body problem itself—is the increasingly popular, albeit ancient, theory of panpsychism. Advocated by a diverse range of thinkers from David Chalmers to theologian David Ray Griffin, this idea, and its close bedfellow panexperientialism, navigates the mind/body conundrum by asserting that consciousness, or experience, is a fundamental property of the universe that can in some form be found everywhere—all the way down to the most elementary particles. According to panpsychism, there is no need to try to figure out how consciousness arises from the complex human brain, because consciousness has been interwoven with matter from the beginning. But before you start imagining rocks having late night talks, note that the idea is not that pebbles and molecules and quarks are conscious in the way that we are, but that they would have some form of what Chalmers would call "protoconsciousness" or what Jesuit priest and paleontologist Pierre Teilhard de Chardin referred to as "interiority."

One advantage of this way of thinking is that it allows for the notion that consciousness is something that develops along a continuum of increasing depth and complexity. Instead of seeking for that magical circuit in the animal or human brain that suddenly gave birth to consciousness, panpsychists argue that consciousness has been developing steadily as an inherent part of the process of evolution. The more complex the organization of matter has become, the more complex the level of consciousness it has been able to sustain. Since the human nervous system is the most complex piece of hardware on the planet, it's no surprise that it is accompanied by the most complex form of consciousness. Though still eschewed by most mainstream philosophers and scientists, this view is gaining ground, particularly among the alternative intelligentsia, in large part because it provides a potentially nonreductionistic framework for understanding the relationship between the mind and the brain (even if some of its proponents, like Chalmers, use it as an argument for the possibility of conscious machines—if all matter is conscious, after all, why couldn't a supercomplex computer be as conscious as you or me?).

But probably the weightiest attempt to counter reductionism—and the one closest to the mainstream—comes from a broad category of theorists who look to the relatively new science of complexity, or emergence, to explain the brain's relation to the mind. For these scientists and philosophers, the notion that consciousness emerges from the activities of the brain is not in question. To say that consciousness can be reduced to the brain, however, is another matter. As Rita Carter describes it, emergence, simply put is "the idea that a complex system can produce something that is more than the sum of its parts." How exactly that happens is, well, complex. The basic idea is that interactions between lower-order phenomena can give birth to higher-order phenomena with properties that cannot themselves be reduced to the lower-order interactions. Just as the wetness of water cannot be found in the hydrogen and oxygen molecules that make it up, so the complex qualities of mind, like reason, decision making, reflection, and emotion, cannot be found in the behavior of our neurons. The appeal of this approach is that while it does not deny the biological roots of mind, it nonetheless acknowledges the validity of higher orders of human experience as having a reality of their own.

If all matter is conscious, why couldn't a supercomplex computer be as conscious as you or me?

Among proponents of emergence theory are many religious thinkers seeking a philosophically and scientifically respectable way to preserve the sanctity of our higher human faculties. But it has also found adherents among materially inclined philosophers and scientists who are not satisfied with reductionist explanations. As philosopher John Searle writes: "Consciousness is irreducible not because it is ineffable or mysterious, but because it has an essentially subjective first-person mode of existence and

therefore cannot be reduced to third-person phenomena. The traditional mistake that people have made in both science and philosophy has been to suppose that if we reject dualism . . . then we have to embrace materialism. But . . . materialism is just as confused as dualism because it denies the existence of subjective consciousness as a thing in its own right."

What the panpsychists and emergence theorists share is a conviction that materialism's failure to adequately account for the actual complexities of human experience is itself reason to leave it behind. In this sense, they can be seen as part of a larger movement of holistic thinkers for whom partial, compartmentalized explanations of the phenomena of life and consciousness are no longer satisfying. Insisting that the only satisfactory theory will be one that addresses the multiple levels and dimensions of our humanity—from neuronal firing to cosmic consciousness—these new, more integral theorists are attempting to forge a science that while remaining true to the results from the laboratory is equally true to the realities of our lived experience. As Templeton prize–winning cosmologist George Ellis told me:

> *The standard mistake that fundamentalists make is to posit a partial cause as the whole cause. Yes, the neurons are there. That's a partial cause of what's going on. What these neuroscientists are missing, though, is the top-down action in the brain, which is the part that gives life its actual meaning. And if you only choose to look from the bottom up, you'll never see that meaning. Think of a jumbo jet flying. The bottom-up view of why it flies is because the particles are impacting the wing from below and moving a bit slower than the particles above. The top-down version of why the plane is flying is because someone employed a lot of draftsmen using computer-aided design tools to design the plane to fly. The same-level view of why the plane is flying is because the pilot is sitting at the controls and making it fly. Now, the physicists tend to miss both the same-level view and the top-down view. And it's the same with these neuroscientists. To return to our flight analogy, they would say that all that's enabling the pilot to fly the plane is the firing of some neurons in his brain. But then they would be missing the fact that actually he had decided to be a pilot when he was a boy. He got enthusiastic about it, he raised the money for his training, and all the rest of it. They just mess all of that up. They are unable to see those higher levels because they're focused on the lower levels.*

Taken together, these alternative theories seem to present a formidable case for the scientific establishment to reckon with. But the materialistic bias in Western science runs deep. And just how exactly it might be overturned remains anybody's guess. With approaches ranging from Radin's theory-making to Fenwick's search for more evidence to Sheldrake's parapsychology-for-the-masses, there is certainly no shortage of good ideas. Yet some feel that one of the more intriguing candidates for the proverbial back-breaking straw lies in the nature of the mind/body problem itself. As futurist and popular science author Peter Russell suggests in *From Science to God*, "I now believe this is not so much a hard problem as an impossible problem—impossible, that is, within the current scientific worldview. Our inability to account for consciousness is the trigger that will, in time, push Western science into what the American philosopher Thomas Kuhn called a 'paradigm shift.'"

Is it possible that it will be science's failure to solve the mind/body problem that will ultimately lead to materialism's undoing? Could neuroscience's bold attempt to penetrate the mysteries of the human psyche be that one step too far that brings the entire edifice crashing to the ground? It is of course far too early to say, but if such an eventuality were to unfold, given the mythic implications, it would no doubt give the gods—and perhaps even Icarus—a good chuckle.

HEART SMART?

The cranium may be home to the smartest organ in town, but when it comes to sheer magnetism, the gray matter in your head may have a little competition on its hands. According to the new science of neurocardiology, we have a second brain, in the form of a dense cluster of neurons, in the heart, and its electromagnetic field is five thousand times stronger than the brain upstairs. So, don't be surprised if the next person telling you to "follow your heart" is your doctor.

Which would really be more earth-shattering—to find out that the brain doesn't create the mind, or to find out that it does?

CONCLUSION: a higher order

As I sit writing these words, several of my hundred billion neurons are firing off messages to some of the fifty thousand other neurons they're each connected with—a microscopic electrochemical fireworks display that makes Coney Island on the Fourth of July look like a candelabra. With the recognition that the end of my project is in sight, a cascade of noradrenaline molecules dripping across the synaptic gaps between axons and dendrites quickens my pulse, bringing a renewed alertness and excitement. There is delight, too, which suggests that a serotonin squall is probably under way, with perhaps a dopamine shower for good measure. To keep up with the demands of the task, my frontal lobes are working overtime, drawing support as needed from the language areas in the temporal lobes and the memory networks wired throughout the cortex. My right hemisphere is appreciating the sense of the whole picture coming together. My left is grinding away to make sure the logic actually does hold together.

At the same time, on another level, *I* am thinking about what to say next. I'm reflecting on the points I've made, the examples I've used, the larger context I've set for the article, and what I ultimately want to communicate in its final few pages. I'm also thinking about who might end up reading it, and wondering what questions you might have at this point that I could still try to answer.

On still another level, I feel myself to be participating in a larger creative process that seems to have its own trajectory—one that was born when life first began to reflect on its own nature, or perhaps even long before, and that seems intent on continuing as long as there are conscious entities willing to partake in its unfolding.

How all of these levels fit together may be life's greatest mystery. And if indeed it can be solved at all, at our current rate of progress it doesn't seem likely that it will be giving up its secrets any time soon. Still, in the face of such multilayered complexity, one can't help but feel compelled to reach for synthesis, whether it's God or the neurons that are doing the compelling.

As I struggle to come to terms with my yearlong journey into the world of neuroscience and beyond, it's as if I'm staring down a hallway lined on both sides with images. On the left wall, I see Phineas Gage, his personality forever shattered by a loss of frontal lobe tissue. On the right, Pam Reynolds, returning from the other side of brain death with memories of the operation intact. On the left, I see my friend's father, Tess, and Julia, all swaying with the changing chemistry of their brains. On the right, Radin's and Sheldrake's psi research, pointing to the mystery of consciousness beyond the cranium. On the left, there are Roger Sperry's split-brain patients, trapped in a perpetual struggle between the two "centers of consciousness" sharing their skull. On the right, field theory, panpsychism, holism, and emergence theory, all insisting that it's time to leave an unworkable materialism behind.

By any stretch, it's a challenging picture to make sense of. And if I spend long enough on either side of the hallway, I find it all too easy to forget about the story on the other wall. Finding a worldview big enough to include it all does seem to be the elusive quarry of this quest—for the field as a whole, and for any individual who wants to come to grips with it.

For my own part, the easiest theories to rule out are those on either extreme. I find the materialist notion that the mind is an irrelevant byproduct of brain function about as plausible as the dualistic idea that consciousness is some ghostly ethereal substance that exists entirely independent of the brain. The truth, it seems, must lie somewhere in between. But where exactly?

Panpsychism holds a certain allure, not only because it does

away with the mind/body problem, but because it seems to validate a basic intuition—that whatever consciousness is, it must have been around since the beginning. But what exactly it would mean for a salt crystal to have "interiority" is still a bit beyond my ken.

Sheldrake's idea that the mind lives in mental fields extending out from my head also seems intriguing, in this case because it seems to provide some explanation for those mysterious spontaneous experiences of telepathy and for the powerful experience of collective consciousness that seems to arise when people gather in groups. Just how the brain's neural network could function as a "tuning system" for consciousness, however, is still something I'm struggling to visualize.

I'm also tempted to go with some version of the emergence idea, as it seems the closest to hard science to say that consciousness in some way comes out of the brain. But as one philosopher pointed out to me, "Until someone explains *how* emergence occurs, we might just as well say God did it."

And speaking of God, there is, of course, still the possibility, asserted throughout the mystical traditions, that consciousness came first and once *it* reached a certain level of complexity, matter emerged. As tantalizing as I find these sorts of explanations, though, they ultimately just replace one hard problem with another: How could something as ephemeral as consciousness give rise to something as concrete as a physical brain? And why did it need to?

Perhaps the most promising and ultimately satisfying theories are the integral ones that acknowledge the essential reality of different levels and dimensions of existence, allowing interiors and exteriors, consciousness and matter, to be seen as different sides of the same event, neither reducible to the other. Where mind and brain are concerned, however, even the most integral theories have thus far been unable to explain *how* the two interconnect, leaving the mind/body problem a mystery for another day.

In the course of my research, one thought experiment I've grown quite fond of is imagining that my consciousness really is being generated by my brain. Think about it—this whole three-dimensional experience of sound, color, thought, feeling, and movement all somehow arising out of the organic functions of this wrinkled slab of tofu-like substance in your head. It seems hard to imagine, but if it were true, what would that say about the nature of matter itself? In fact, if I think about it in this way long enough, I start to wonder which would really be more earth-shattering—to find out that the brain doesn't create the mind, or to find out that it does.

What does seem clear to me at this point is that no matter how much we learn about how the brain shapes our experience, we probably don't have to worry about losing our humanity in the process. As George Ellis and others have elucidated, there are levels of who we are that simply cannot be understood by looking at our neurons alone. Although we may not lose our humanity to neuroscience, however, it does seem likely that as research progresses, we will have to let go of a few ideas—possibly even some big ones—about what our humanity is made of. The great specter of brain science is that it will demonstrate that we are merely conscious organic machines, that all of our experience and behavior originates in the brain. Based on the evidence from frontier science alone, it doesn't seem likely at this point that it will quite be able to do that. But let's say that it were able to show that *most* of our behavior and experience is rooted in the brain. What would that mean? Well, for starters, we'd have to come to terms with the fact that we're a lot more organic machine than we'd like to think—that, as much as we savor the nuances of our personal wishes, aspirations, and personalities, most of our responses

BIRD BRAIN

Birds have long been believed to be at the lower end of the intelligence scale because their brains lack the complex structures that give higher mammals their cognitive capacities. But recent research has overturned this misconception, showing that some of our feathered friends are in fact as intelligent as higher hominids. Birds have been shown to have a sense of humor, be efficient in tool design, and some, like the African gray parrot, can even construct meaningful sentences using human language.

In an ironic turn of events, brain science just might end up supporting humanity's spiritual aspirations in a way no one expected.

are driven by genetic and social conditioning wired into our brains on a level we cannot see.

Now, if you look at that statement carefully, you might notice that it starts to look a lot like a sort of twenty-first-century version of how spiritual luminaries have been describing the human predicament for the last two or three millennia. From the Buddha's elaborate teachings on the conditioned nature of mind to twentieth-century Russian mystic G.I. Gurdjieff's proclamation that "man is a machine," a central thrust of mystical teachings throughout the ages has been a call to transcend our conditioned, mechanistic existence and discover a freedom that lies beyond all conditioning. And according to sages across traditions, the first step to doing so has always been facing just how deeply conditioned and machine-like we are. So, in an ironic turn of events, brain science just might end up supporting humanity's spiritual aspirations in a way no one expected. By exposing the impersonal mechanisms behind our cherished personalities, it may inadvertently be helping to clear the way for the discovery of that which the great masters have always said lies beyond them.

And what about "that which lies beyond"? What about the great mysteries of consciousness—of paranormal phenomena and mysticism? Will brain science have anything to teach us about those? In this case, the weight of the evidence would seem to suggest that the answer is probably "no." Whatever it is that is still paying attention when the brain is flatlined during NDEs, whatever it is that allows us to perceive at a distance in telepathy and other psi experiences, and more importantly, whatever it is that reveals itself in mystical experiences—*that,* I would dare to speculate, is probably not going to be reducible to our synapses.

In the case of our mysterious capacities to sense, know, and feel beyond the limits of our skulls, as Radin pointed out, these are ultimately questions of physics rather than of biology or neuroscience. The operative question, in this case, is: How is information being transferred through space and time in a way that bypasses the ordinary senses? Whether we explain that with Sheldrake's notion of mental fields or with Radin's "bioentanglement," in either case, we are well outside the realm of the neuron.

Where mysticism and spirituality are concerned, however, I think the issue is somewhat different. For although there are certainly a number of New Age physicists who would argue that mysticism, too, is a matter of physics, based on everything I've seen, I think that here we are dealing with something of a higher order—an order that by its very nature cannot be reduced to the levels below it. This is the testimony of mystics across the ages, and there is nothing in neuroscience as of yet that seems equipped to refute it.

Now, the fact that neuroscience alone cannot refute the existence of that higher order does not in itself make it any easier to prove that such an order exists. There are certainly many who would argue vehemently that we have no scientific reason to believe in the claims of religion and mysticism, however forceful or enduring they might be. Pointing to research like that of Andrew Newberg, they would assert that biology is perfectly sufficient to explain the experience of spirituality. But, as Newberg himself made clear, what they would be missing is the fact that those who have had even a taste of mystical experience universally report that experience to be "more real" than anything else they've experienced. Materialists could, of course, counter that such subjective perceptions have no place in the quest for objective knowledge. However, even if we take the materialist position that the brain is the sole mediator of experience and the final arbiter of truth, we are left with the fact that human brains across the ages have universally concluded that the spiritual reality glimpsed in mystical experience is in fact of a higher order than the ordinary reality we experience every day.

And this leads us to what may be the most interesting point of all. For as Newberg's research demonstrates, there is little doubt that the brain is at least a big part of what is enabling us to perceive that higher order. This means that, in what may be the greatest miracle we know, life somehow managed to evolve an organ capable not only of reflecting on itself but of perceiving something higher than itself—perceiving, even, that which many believe to be the very source and creative driver of the cosmos. Looked at in this way, the brain suddenly starts to seem a lot less like some frightening organic computer that we'd do well to distance ourselves from and a lot more like a rather mysterious and even spiritual event in its own right. After all, if it can do all that, who knows what kind of genius and untapped potential live within its folds? Given that human evolution is still in its early days, it in fact seems likely that the awesome powers of the human brain have only begun to reveal themselves. If we can use our gray matter to avoid destroying ourselves, we may find that the story of humanity's higher potentials is just getting started. ■

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The Alchemy of Healing

Transforming the Legacy of the Past at the Quest for Global Healing Conference
Ubud, Bali

by Jessica Roemischer

LAST DECEMBER, I FLEW TO THE INDONESIAN ISLAND OF BALI to attend the first Quest for Global Healing Conference, a five-day event sponsored by a handful of organizations dedicated to fostering global awareness and social change. There, amid the tropical paradise of the South Pacific, an audience of over four hundred—a majority of whom were from the privileged and progressive First World—heard the visions and voices of those who have experienced hardship, injustice, and survival. Some of the presenters had suffered in the most violence-torn regions of the world, from the Middle East to Cambodia to South Central L.A. Others bore the legacy of history's great atrocities, such as the Holocaust. And their presentations accompanied those of prominent individuals who have, each in their own way, been catalysts for the emergence of a global consciousness and conscience—most notably Archbishop Desmond Tutu (see page 32), *Apollo 14* astronaut Edgar Mitchell, and human rights activist Lynne Twist.

Over the course of the five days, I had the opportunity to interview many of the conference presenters. And for me, the

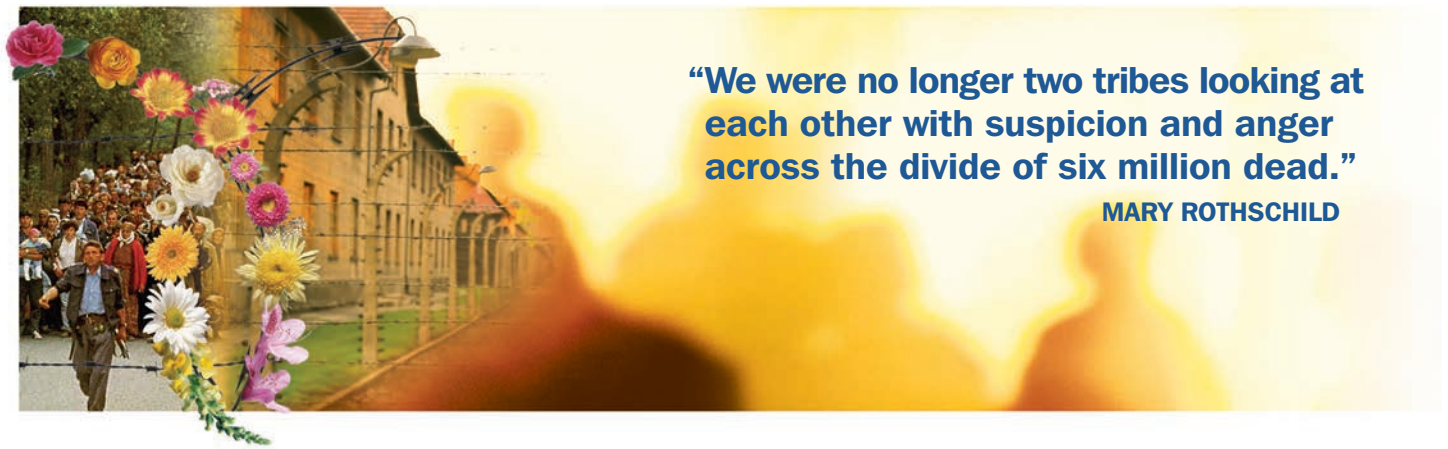
most powerful, poignant, and indeed, healing encounter took place in a conversation with German-Jewish reconciliation team, Martina Emme and Mary Rothschild. Mary's mother survived the unimaginable horror of Auschwitz. Martina's grandfather was a Nazi who served in the German army. My own relatives—Eastern European Jews—were brutally murdered by the Nazis as they swept through the shtetls of Romania. As Mary and Martina delved into their experience of grappling with the legacy of the Holocaust, sitting with me on their hotel's poolside patio, I found myself awash in what I realized were the unconscious and unresolved imprints of my own ancestral past. "Many of them didn't even make it as far as the concentration camps," I remembered my dad saying when I was young. And while I had *known* what had happened to my relatives, their terrible demise had always existed as some distant and abstract reality that I had never allowed myself to truly *feel*—until that morning in Bali, in the presence of two people who had given their lives to facing into their own history, and mine.

Through this experience, I realized that "global healing" takes place within the inner recesses of the human mind and heart. It is the great gift human beings bestow on one another when they have the courage to engage in an unflinching reckoning with themselves and their past. And, as powerfully conveyed in the following excerpts from my interview with Mary and Martina, when people come together in a mutual willingness to face into that legacy, they can miraculously transmute the horrors of the human condition into a deep and profound relatedness that "alchemically transforms" them and, perhaps, may even transform the world.

MARY: When I was translating my mother's diary [from Auschwitz], I realized that I couldn't cope with the experience alone. So I joined a group in Los Angeles that was addressing the Holocaust. But after a few years, I realized that something was missing—something that I didn't have words for. I started looking for it and came across an organization called One by One that was engaging in Jewish-German dialogue in Berlin, and I had the sense that I had to go there. My mother told me that after the war, every time she heard the German language she would start shaking. But the first time I heard a German say, "I'm so sorry," I relaxed; I let go. Something inside me changed, and we were able to listen to each other on a very deep level. I was actually able to share their suffering and realized that they were carrying this history from the other side, but with the same degree of pain.

We went as a group to a concentration camp and prayed together at the site of the crematorium. By the end of our time there, we were no longer two tribes looking at each other with suspicion and anger across the divide of six million dead. We were a community. And I was shocked to feel compassion for the Germans, for the legacy that they inherited. I had the sense that I wasn't carrying this alone anymore. There in one of the rooms at the camp, I thought, "Though I walk through the valley of the shadow of death, you are with me."

MARTINA: I can hardly bear reading the diary of Mary's mother, because if you let it enter you, it's excruciating. I think to myself, "She *lived* through it, and I can't even bear to *read* it." But we need to go to that valley of the shadows first, to come



"We were no longer two tribes looking at each other with suspicion and anger across the divide of six million dead."

MARY ROTHSCHILD

to that place Mary described, and in my country so few people want to. I needed a hammer to break through the conspiracy of silence. In fact, I've lost friends and family who can't understand why I'm committed to this work. They are suspicious, and they keep asking me, "Can't you focus on your career? Can't you do something of real value?" There is so much mistrust and skepticism.

MARY: Even among Jews, there are very few willing to do this. The largest group of second-generation Holocaust survivors lives, like I do, in Los Angeles—perhaps fifteen hundred or so. Of those, maybe one hundred showed up for Second Generation meetings there. And of that number, three of us went to Berlin. But I believe that everyone who has a connection to the Holocaust has land mines in their psyche and you have to deal with them, especially if your parents were in a concentration camp. Two years ago, my mother finally allowed herself to go crazy, although I'm sure if someone had given her a choice, she wouldn't have. What happened, I think, is that her defenses fell off in old age. All the trauma came to the surface, and she went into a state of absolute panic. But it makes people very uncomfortable and angry when they hear that the survivors of the camps were not liberated when the camps were liberated. They don't want to hear it. So I can understand why people love Anne Frank, because she left us with the naïve perception of the world she had while she was still in hiding. I'm sure that if someone had interviewed her in Bergen-Belsen before she died, she would no longer have believed that all human beings are good at heart.

MARTINA: You know, I have trouble with the word "forgiveness" because, to me, what happened in the Holocaust is unforgivable, *unforgivable*. When I began these dialogues, I had never sat with people who were survivors, or descendants of survivors, and I was full of fear. But it was a sense of responsibility for the collective that made me realize, "I have to do this."

MARY: It *is* unforgivable. Simon Wiesenthal said, "Forgive them not, for they knew what they were doing." And yet to sit in a room with people who are working so hard to grapple with their history, with this collective suppression, to sit still and listen to their stories and absorb them into my being, made something happen inside me. I don't know if it was forgiveness, but there was a sense of profound gratitude. And I was fully alive in that room. There was something so enlivening and energizing, inside and outside.

MARTINA: The intensity of that connection is so much more than friendship. You feel the potential for a human being to be united, to be connected, to be related, having overcome the feeling of being individuals. Now, there are some people who do this because they need a process, they need affirmation—like, "I'm a good German" or "I'm a good Jew." But in this work, we need more than that egocentric model; there needs to be a motive for something else, something more.

MARY: It's not even about the Holocaust anymore. It's not just about Jews and Germans. We are helping to heal a very profound wound in the collective psyche, as Judith Thompson of One by One has said, and I believe this work is rippling out far more deeply than we realize. I feel I was born to bear witness to this history and to alchemically transform it into something that can help.

And there is an acceleration in this, a quantum dimension. Our experiences have evolved into going to Bosnia, where the people were dealing with their own atrocity. They were really raw. We walked into their lives five years after the war, and it was like staring at my mother five years after the Holocaust. I saw people frozen in their grief, unable to articulate it, unable to cry, unable to mourn. The women were impeccably dressed. We sat in a circle of perhaps a hundred people—Muslims, Serbs, Croats. Nobody shed a tear. And the facilitators used us as a scare tactic because, for the people in that circle, looking at us was like staring at their children fifty years from now. A lot

of second-generation descendants of the Holocaust, like myself, carry post-traumatic stress; we have rage, we have anger, we have mysterious psychosomatic and life-threatening illnesses. In fact, research suggests that extreme trauma is transmitted at cellular levels to six successive generations, which means that I got it before I was born. But I have said that the Holocaust is the "gift that keeps on giving," and the facilitators used us to send this message to the Bosnians: "This is what you're looking at if you don't start dealing with your trauma now." It was like two generations of genocide looking at each other across the barriers of time. And it worked. It worked beyond our wildest expectations, and they began to open up to each other and talk.

MARTINA: When you begin to have courage and listen to each other and face history, a miracle can happen. It's hard to find words for it. There's something more that emerges between two people or in a group. Maybe transformation is the right word. You change. You are not the same person that you were before. [Jewish theologian] Martin Buber gave me an explanation for what unfolds when there is this deep connection—he called it the "in-between world." When the relationship intensifies, this "in-between" emerges as something more than the "I" and the "thou." He would call it God, and although I'm not a religious person, I can feel the quality of it. It can be like a catharsis. People are very exhausted, emotionally exhausted, and at the same time—

MARY: —liberated. ■

Mary Rothschild and Martina Emme participated in the Quest for Global Healing Conference as members of the Fetzer Institute's seven-year project entitled "Dialogues on Compassion and Social Healing." The conference was sponsored by the Cross Cultural Journeys Foundation, the Institute of Noetic Sciences, and others. The next conference will take place in Bali in May 2006.

ONLINE EXTRAS: Listen to the audio of Jessica Roemischer's interview with Mary Rothschild and Martina Emme, as well as interviews with other speakers from the conference, including Archbishop Desmond Tutu, on *WIE Unbound*.
wieunbound.org/marymartina


As I stood there on the edge of this bottomless pit, I felt something well up in me and make a decision to live.

BETWEEN BLISS AND DEVASTATION

The transformative journey of a federal prisoner

Excerpts from an interview with Fleet Maull

by Ross Robertson

FLEET MAULL IS A DEDICATED MAN. Founder and director of both the Prison Dharma Network and the National Prison Hospice Association, this fifty-five-year-old professor at Naropa University in Boulder, Colorado, is also a longtime teacher of Shambhala Buddhism, an ordained Zen Peacemaker priest, and the U.S. director of the inter-faith Peacemaker Community. Perhaps most compellingly, Maull is a man who turned a life of contradiction into a life of integrity. In 1985, at the age of thirty-five, he was indicted for drug trafficking, sentenced to thirty years without parole, and thus began a fourteen-year odyssey of transformation behind bars at the U.S. Medical Center for Federal Prisoners, a maximum security prison hospital in Springfield, Missouri. Torn away from his family and his spiritual community, he was left alone to face himself and the choices that had led him to a point of no return.

Maull came of age during the cultural revolution of the sixties. Like many of his generation, he openly rebelled against the conservative world of his parents, searching for adventure and a life of vividness and intensity. Traveling to South America, he found something of what he was looking for living on a sailboat in the Caribbean. Later, he found it working a small farm in a valley high in the Peruvian Andes. And eventually, he also began to find it in the danger- and adrenaline-filled world of the international narcotics trade. In the mid-seventies, he read an article in *Rolling Stone* about Naropa and its founder, the renowned meditation master Chögyam Trungpa Rinpoche, who was instrumental in bringing Tibetan Buddhism to the West. Immediately, Maull knew that he had to go there. With his Peruvian wife, who was pregnant at the time, he moved to Colorado, enrolled, and soon became a student of Trungpa. But he lived a double life. On one hand, he was engaged in a serious study of psychology and the Buddha-dharma; on the other, he was caught up in a drug habit and secretly hauling backpacks full of cocaine on smuggling runs from Bolivia. By the early eighties, he had become one of Trungpa's closest attendants, yet he was in turmoil over his inability to resolve the incongruities of his life, and his marriage was falling apart. When he finally quit smuggling for good, it wasn't long before his former partners fingered him, and he was confronted with the choice to run or face the possibility of life in prison. He told his guru everything, and after considering the matter for a few days, Trungpa advised him to turn himself in. "That was the first time," Maull says, "that I ever followed his advice."

It was in jail that Maull turned his life around, beginning to meditate in earnest. He completed the Tibetan practice of the *ngondro* (a foundational practice that includes 100,000 prostrations) in his tiny cell, received initiation from Tibetan lama Thrangu Rinpoche, and took novice vows as a monk. He taught GED and ESL classes all day, cared for dying prisoners in a hospice program he helped develop, led meditation groups in the chapel in the evenings, and eventually matured into a national prison reform activist. In fact, he became so committed to the work he was doing at his high security institution that when given the opportunity to finish out his sentence at a minimum security facility, he turned it down, staying until his early release for good behavior in 1999.

I WENT TO PERU LOOKING FOR SOME KIND OF AUTHENTIC LIFE. I lived for years up in the sacred valley of the Incas, and there was one particular time when I really had a deep visionary experience of non-separateness. This was after taking a plant called San Pedro that contains mescaline. There was an energetic fluidity to the world, and the boundaries that I normally perceive as my own body were completely liquid and contiguous with everything else. My whole previous notion of the distinction between animate and inanimate objects completely broke down in that moment—in the experience of one living organic reality and energetic aliveness. The experience just continued and continued, even after the mescaline wore off. When I would put my foot down, I did not even have the sense that it was going to hit something solid.

Part of what had driven me into becoming an expatriate and living outside the system was my very polarized "us vs. them" attitude. But after that experience, I could never go back to seeing the world that way, because I had seen that we are all a part of one process. □

EVERY SUMMER IN COLORADO, Trungpa Rinpoche held a two-week retreat for his committed students up at the Rocky Mountain Dharma Center. We were in a big field up in the mountains, with tents all around, and Tibetan banners flying, doing military-style training, with meditation and teachings and so forth. It was a complete *vajrayana* world.

Walking up from the lower gate one day, I saw Trungpa coming down the hill, heading toward the big tent where the teachings and meditation practice happened. And suddenly I saw him like I had never seen him before. I saw a dharma king, a magical Buddha figure. It was a powerful visionary experience that's very hard to put into words, but in some way it was similar to what I'd seen in Peru. It was as if I saw his essence.

This changed my whole relationship to Trungpa and to his teachings. Prior to that, I was very much trying to be in his world on my own terms, trying to hold onto as much of my own world as I could. Afterwards, I wasn't holding onto anything. When I saw that his essence was *so* impersonal, he became a mirror to my own condition. Being in his presence was either a joyful experience of coming home and being held in the essence of my own being, or, if I resisted, it was terrifying. In the nakedness of the experience, I was absolutely confronted with my ego. □

WHEN I GOT SENTENCED TO THIRTY YEARS my knees actually buckled. I didn't fall to the floor—my lawyer was standing by my side, and he kind of grabbed my arm and held me up. They took me back to the county jail, and that evening they put me in a solitary cell in an empty wing of the building. There was only one tiny window way up high; if I stood on the sink I could almost see the security lights outside. It was very dark. Every now and then I'd hear some sounds echoing through the chamber, but there was nobody else in the whole wing. I don't think I fell asleep until four or five in the morning.

At some point in the middle of the night, I came to a very dark precipice, and I had to make a choice between living and dying. It wasn't like I was contemplating suicide—it was a matter of choice about whether to live or to give up. By this time, I'd already been locked up for about six months awaiting sentencing. Most of the time I was in a cell with ten other guys, a cell filled with chaos, noise, fighting, and craziness. You couldn't sleep; it was insane. But on this night they left me isolated with the fact that I'd been sentenced to thirty years with no parole, and I thought that meant I would not get out until I was sixty-five years old. My son was nine at the time. As I stood there on the edge of this bottomless pit, I felt something well up in me and make a decision to live. It wasn't like the bells were ringing, "It's okay now." It was just utter darkness. But somehow, a will had risen up in me like an instinctual thing and made a choice for life.

The next day, I finally began to experience the weight of the grief and the pain of what I'd done to my son, to myself, to my family and my community—the utter waste and insanity of it. I'd never really been confronted with the consequences of the decisions I'd been making; I'd gotten away with a lot over the years. Now, my back was up against the wall, and I couldn't deny my own complicity in creating all this damage. And that fueled me throughout the rest of my time in prison. I became radically committed to eradicating every kind of negativity and uselessness from my life. □

I STARTED PRACTICING LIKE MY HAIR WAS ON FIRE. I spent a lot of time alone in my cell at night, reading dharma books from nine until twelve and then meditating until I went to sleep at two. I'd get up again at seven for a full day teaching school and doing hospice work.

Once a year they gave you a week off from your prison job, and I would get some food from the commissary that I could heat up in a microwave, hole up in my cell for nine or ten days, and do a full-blown intensive retreat. This was twelve to fourteen hours of practice a day. About four or five days into my second retreat—this would have been 1991, six years into my sentence—I was suddenly in that luminous world again, the world of the guru's mind, that fluid contiguous relationship with the rest of reality that I had experienced in Peru. But this time there was nothing in my surroundings to support the experience in any way. My guru had been dead for four years.

The only thing that was giving me access to this space was the practice, and it was an incredibly powerful moment when I realized that. It confirmed everything my teacher had ever said. When we would try to psychoanalyze his practices and teachings and figure them out, he often told us, "Hey, just do it. When you get into that Cadillac or Mercedes or Porsche, you don't have to be a master mechanic to turn it on and enjoy the ride, right? Just do the practice. It works." In that moment, I saw the reality of those words. I had rediscovered what I'd been looking for my whole life. □

THE PRISON ENVIRONMENT IS HELLISH, BUT THE DEEPEST PAIN is that you've managed to get yourself torn out of your life and away from your loved ones. Sometimes when I was alone in my cell, I would suddenly be flooded with the absolute, excruciating reality of not being there for my son. It would just hit me like a blinding, searing light.

One night I was at the point of starting to bang my head on the wall. I think I was standing up at the time. I was really about to beat my head into the concrete, but for some reason I just stayed with the experience, kind of holding it. A space started emerging around this white-hot ball of pain and despair. And my awareness of this space grew and grew until suddenly the pain just dissolved into it, and I went through the other side into a kind of ecstasy. I felt ashamed, like, "How dare I?" But I just found myself landing on the other side of that experience in the elation of my own being. This happened in the midst of looking at the stark reality of being in a shit-hole hell realm of a prison full of aggression and violence and abuse, and the pain of not knowing whether you're ever going to get out. □

IF YOU BUMP INTO SOMEBODY IN PRISON, you have to clean it up real quick and say sorry or they come back and knife you. There was a big African-American guy who had just come from Leavenworth, a very tough maximum security prison where you walk around with magazines under your shirt to keep somebody from knifing you, and people are killing each other all the time. And he picked a beef with me over something completely stupid. I came out of my room, he was mopping up, and he accused me of screwing up his floor. But the floor was completely dry—he was just grandstanding for a couple of buddies.

Normally, I would have sucked it up and said, "Oh, yes, hey, I'm sorry man, it won't happen again." And that would have been that. I did that hundreds of other times. But for some reason I just wasn't in the mood for it. So I told him, "Man, get off it. If you want to entertain your buddies, go somewhere else." Looking back on it, it was a very crazy thing to do. He started getting pretty ugly and intense, and eventually he took off. But I knew this was a very dangerous situation, and it wasn't going away. I knew it had to be dealt with.

So I went looking for him, and I found him in one of the large bathrooms. He had gone back to his bunk, and he had gotten a knife. He wasn't holding it, but I found out later that he had it on him. I walked up to him and got in his face and really laid into him. It was almost like an out-of-body experience, because it was so unlike the way I'd ever dealt with stuff in there. I was completely winging it, confronting him on his bullshit. We were nose to nose, and it was going to come to blows any moment.

There are very intense racial issues in prison. And you know, I worked hard not to buy into any of that, even though most of the other white guys around me ended up hating the black guys. It's kind of this cross-cultural clash that happens, and people just end up hating each other. But I was determined not to absorb any of it. In actuality, I spent my life in the prison school every day taking a lot of risks teaching primarily African-American guys to learn how to read, to get their GEDs. There's a big thing in prison about everybody being equal, and you cross a lot of boundaries being a teacher, because anybody that tries to act any different than anybody else tends to get called out. I spent two or three more hours every day doing hospice work with this guy's brothers, wiping their butts and holding them in my arms when they cried and wailed and died. So I just didn't feel like I needed to take a lot of shit off him. I was the white guy, you know, it was that kind of thing.

So I told him that. I said, "*Wake up*. This is not just another white guy you're going to push around. This is who *I* am. Relate to *me*." I took a chance. And you know, he finally settled down. He even told me that he was instinctively operating out of fear, in his Leavenworth mode. He admitted that he had gone and gotten his knife, and he thought that I was going to do the same thing, because that's what you do in Leavenworth. We didn't exactly become buddies or hang out, but we did end up in a friendship of sorts.

I think there's something magic about being committed. When you commit yourself in a certain direction, the universe begins to cooperate with you. You're willing to take risks that ordinarily you wouldn't take. You throw yourself into a situation and you do what has to be done. □

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I COULD EASILY HAVE DIED in prison. Hospice work was very much a confrontation with my own mortality. I had a patient named Lyle who had come to the hospital from another prison for AIDS treatment. He got involved in the meditation group I was running, and we became friends. Later, he was transferred back to the prison he came from, but eventually he got very ill and they brought him back. I hadn't seen him in almost a year. He was lying there shriveled up on his bed, completely emaciated, and he had tuberculosis. Because they thought he might still be contagious, they had him in an isolation room, and I had to wear a mask to go in. They closed the door and locked me in there.

As soon as he saw me, he wanted to get up. He was talking about how he had developed such a strong practice at the other prison, and how he felt so bad that he couldn't meditate now. I kept telling him, "Just lie down, lie down," but he wanted to sit up and meditate. He wanted to meditate with me. So we sat there knee to knee, him on his little bunk and me in a metal folding chair. Our faces were only eighteen inches apart. At first it was fine, but then the thought started creeping into my head that I was basically exchanging breaths with this man—my dear friend—who might have active tuberculosis. My surgical mask was starting to get wet with my breath, and I knew they were only good for about fifteen minutes. Once they get wet, they don't really work.

I tried to dismiss it, but the fear just kept building and building. I started thinking, "Where is the chaplain? He said I could only stay for fifteen minutes, and I think I've been here for at least twenty. When is he going to knock at the door?" Finally, I panicked and asked my friend to lie down, told him I'd be back up later that night. I'd been doing hospice work for a long time, but I hadn't gotten over my fear of death. I had to knock on the window to get the chaplain to come and let me out. □

"GRAB YOUR STUFF. YOU'RE GOING," the guard told me. "Where am I going?" I asked. "Just go," he said. "You're going down to R&D." That's where they take people who are getting out. When I got down there, they gave me some street clothes to wear, and they took me upstairs, got me $50 from my commissary account, called a taxi, opened the door, and said, "You've got three days. Don't be late."

I was going home for my father's funeral. They wouldn't let me see him before he died except with a full guard escort, in shackles and leg irons, and I refused. I didn't want to bring that shame into my family's world. Then when he died it was the same thing—I had to have four guards, so I refused. The warden came and talked to me, saying I had to go. "I'm not going that way," I told him. The next morning the guard came and woke me up at five o'clock and sent me out alone.

So there I was, standing outside. I hadn't been out of that building in thirteen and a half years, and there was a brilliant blue sky. There were flag poles in front, and the flags were fluttering. I was just flooded with grief over the death of my father. Years before, when I was in prison and Trungpa Rinpoche died, I expected it to be utterly depressing. But instead I woke up every morning in a kind of bliss, and when I would go outside his presence was everywhere, the whole sky was him. He had this oceanic mind that would just hold you. And on this day again the whole sky was him, and it was my father; it was devastation and bliss and joy all mingled together.

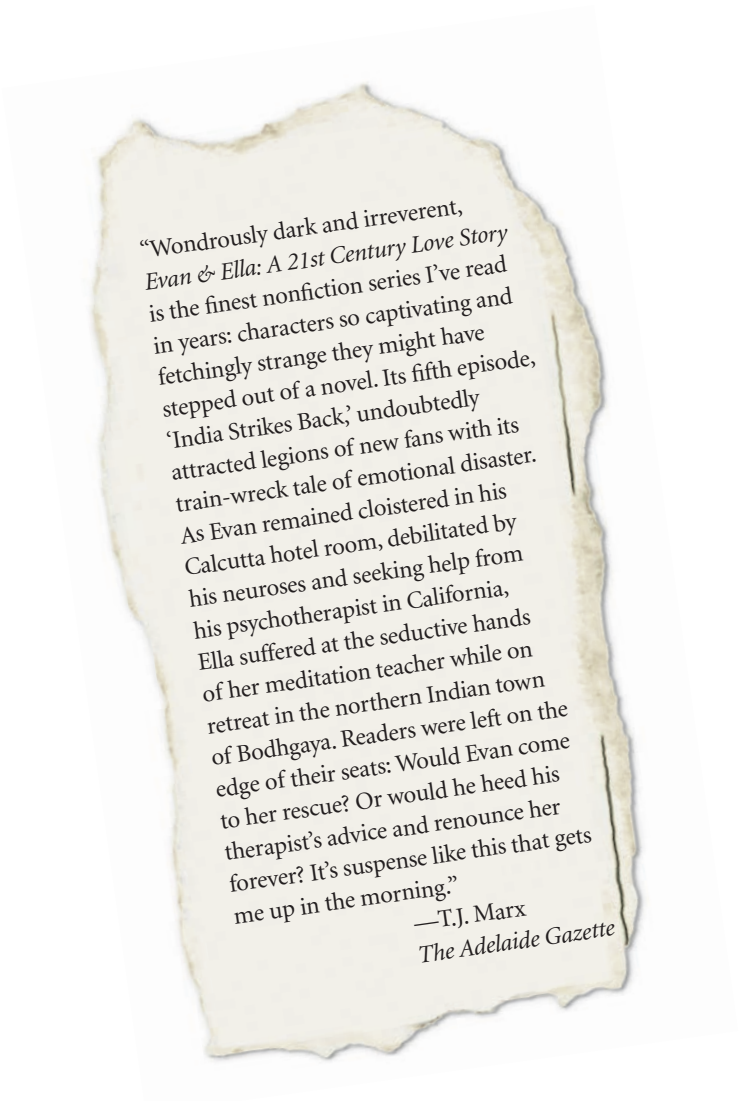
The taxi came, and I went home for three days and then came back. Five months later, I got out of prison. I could barely deal with the speed of the world; I was actually afraid to cross streets. It took me about a year before I sped up to it and became a maniac again like everybody else. ■

Fleet Maull's first book, *Dharma in Hell: Prison Writings of Fleet Maull*, is due to be published by the Prison Dharma Network in 2005.

evan & ella

a 21st century love story

Part VI: Compassion vs. Kundalini



FROM: EVAN MCALLISTER <GLASSYZEN@YAHOO.COM>
TO: ELLA PARIS <ELLAPARIS@HOTMAIL.COM>
DATE: SAT, 30 OCT 2004 11:53:16 (IST)
SUBJ: SAYING GOODBYE

dear ella,

i can't come to bodhgaya to be with you. it's not that i don't feel awful about what happened to you, and if i had the chance, i'd kick that bastard meditation teacher's ass into the stratosphere. but i can't get involved in your karmic stream—not now, because the only way either of us will ever grow as individuated souls is if we sever our interlinked chains of karma and begin to forge new paths, *alone*.

luckily, i have no doubt in my mind where my path is leading me: straight to GOD. last week, in calcutta, i finished reading the most incredible, amazing, life-altering book in the world. i can't believe i didn't know about it before. it's called "autobiography of a yogi" by paramahansa yogananda. yogananda was a student in the ancient mystical lineage of the immortal mahavatar (or "mega-incarnation of god") named babaji, who's a nearly 2,000-year-old master of "kriya yoga" who appears in the form of a teenage boy. in case you've never heard of it, kriya yoga basically involves sophisticated breathing techniques that enable you to experience God-Consciousness, and it's such a powerful practice that you're only supposed to do it under the strict guidance of a kriya master. yogananda even warns that "the body of the average man is like a fifty-watt lamp, which cannot accommodate the billion watts of power roused by the practice of kriya."

pretty cool, right? well, get this—the night i finished the book, i had this dream where i'd just come in from surfing this killer wave and was lying on the beach in the warm california sun. then, from out of nowhere, someone dumped a bucket of ice-cold lemon-lime gatorade on me! i was like, "what the fuck?" and when i sat up there was this dark-haired 16-year-old boy grinning mischievously at me. "what the hell'd you do that for?!" i shouted at him. staring into my eyes, he said softly but distinctly: "evan, my child, you will go to rishikesh, the holy city at the foothills of the himalayas. there you will wait for your true guru, a living

> "evan, my child, you will go to rishikesh, the holy city at the foothills of the himalayas. there you will wait for your true guru, a living master of the kriya yoga path."

master of the kriya yoga path." and that's when i realized it was babaji himself, appearing to me on the astral plane.
so, anyway, that's where i am now—rishikesh, on the banks of the sacred ganges, where the beatles themselves came on retreat with the maharishi in the late 60s. and i swear that i'm not going to leave until i find my master.

well, this internet café isn't cheap, so i gotta run. again, babe, i'm really sorry you feel so bad, but maybe it's time that you take a good hard look in the mirror and ask yourself what you're doing. you don't want to give up your dreams of being a doctor, wasting your whole life away in india, do you? you should go home to brooklyn where things aren't quite so intense. it would probably be best if we didn't contact each other anymore. our karmic lines are entwined enough to keep us both bogged down in the swamp of samsara for endless eons unless we break free now, while we still have the chance.

evan

FROM: ELLA PARIS <ELLAPARIS@HOTMAIL.COM>
TO: EVAN MCALLISTER <GLASSYZEN@YAHOO.COM>
DATE: SAT, 30 OCT 2004 11:55:42 (IST)
SUBJ: **RE: SAYING GOODBYE**

Dear Evan,
I understand. Good luck finding "GOD." I hope that works out for you.
Ella

FROM: ELLA PARIS <ELLAPARIS@HOTMAIL.COM>
TO: EVAN MCALLISTER <GLASSYZEN@YAHOO.COM>
DATE: SAT, 25 DEC 2004 09:32:42 (IST)
SUBJ: **PLEASE READ.**

Evan,

I know when you last "interfaced" with me two months ago you said we shouldn't contact each other anymore, but I was looking over my emails and felt compelled to write you. Are you in Rishikesh or did you find a guru already? Believe it or not, I'm still in Bodhgaya, the dirtiest place on earth. It's smack in the

> I think I'm still recovering, trying to get over how incredibly depressed I was. Or am.

middle of the most corrupt state in all of India, with bandits and beggars and no proper sewage system or clean water. But for right now, it's home. And hey, the Buddha was enlightened here under the Bodhi Tree so it can't be all bad.

Things were so crazy with me for awhile I think I'm still recovering, trying to get over how incredibly depressed I was. Or am. After nine months in India it's no wonder I feel as if I'm coming unhinged.

The good news is a couple months ago, I was taken in by a wonderful family. They're from Tibet originally but they live in Nepal and every year they travel to Bodhgaya and set up a teashop for the Tibetan New Year. I was spending so much time in their shop drinking tea and smoking bidis,* and of course I was crying a lot, so I guess they thought I was an orphan or something.

In any case, there's Tenzin and his wife Ani as well as their two young boys, Jigme and Kelsing, who are totally sweet. In the mornings I help Tenzin learn to write English, and then Ani and I set up the shop. It basically entails moving the beds around the periphery of the tent and putting rugs over them for people to sit on and moving some tables, getting water. Incredibly, I've managed to pick up some Tibetan and have even taken a liking to butter tea. The taste is pretty brutal the first time around, it's salty and the butter they put in it comes from yaks.

There are a lot of Europeans and Americans traveling through Bodhgaya all the time; they hang out at a funky café called Shiva's so I meet some interesting people there. But mostly I spend time with the Tibetans. They are the only thing that has kept me from losing it these past months. You really can't imagine what a unique people they are until you spend time around them—so beautiful, incredibly smart and funny. I'm often awed by how simple yet complete their devotion is to Buddhism. It's like their faith permeates every aspect of their lives, which is basically the complete opposite of where I'm at. After what happened with Percy Musgrove, a guy who was supposed to be enlightened (whatever that means), my ability or motivation to pursue the Buddha-Dharma has completely withered. I long to open my heart to it like the Tibetans do, but it's just not possible anymore.

* *bidi:* a small, thin, Indian cigarette made from poor-quality tobacco and tied at both ends with a colorful thread.

I don't want to talk your ear off with my depressing blather, but I hope you're doing ok and that maybe I'll hear from you sometime. Merry Christmas.

Ella

FROM: EVAN MCALLISTER <GLASSYZEN@YAHOO.COM>
TO: ELLA PARIS <ELLAPARIS@HOTMAIL.COM>
DATE: WED, 05 JAN 2005 18:10:02 (IST)
SUBJ: **BABAJI**

hi ella,

even though i'm kind of glad to hear from you, i should let you know right now that emailing you is in direct conflict with my yogic practices. a few weeks ago i took a vow of brahmacharya—which means *celibacy*. even though it may seem extreme to you, i'm taking this very seriously and i don't want to put myself in a position where there's even the *potential* for sensual thoughts to arise.

but since you wanted to know so badly . . . no, i haven't found my guru yet. it's only been two months, and i'm not worried because i've been praying every night for him to come to me—sometimes for hours on end. besides, finding your true guru can take *lifetimes*. and what else is there to do anyway in this crazy, illusory world of *maya* and mayhem? as the Guru Gita states: *"The Guru is the beginning and beginningless, / the Guru is the supreme deity, / higher than the Guru nothing is, / to that, O Guru, salutations!"*

> i feel so light, peaceful, and serene all the time. i'm doing lots of yogic breathing and meditating two hours a day.

still, being in rishikesh is completely great. it's really hard to believe that i've been here so long. i've honestly never been happier. i feel so light, peaceful, and serene all the time, from dawn to dusk. i'm doing lots of yogic breathing and meditating two hours a day, and i have no material possessions whatsoever except for my wallet, my watch, my ipod, a toothbrush, a pair of sandals, an orange lungi,* an old pumpkins t-shirt, and a few good books. have you ever read "the upanishads," ella? they're the most profound and inspiring hindu scriptures around. unfortunately my copy was stolen by one of those deranged brown demon monkeys this morning while i was eating breakfast. i tried to chase him down but he climbed onto a rooftop and began chattering angrily at me. finally, i turned away in disgust, but then something amazing happened: as i was walking back, i thought i caught a glimpse of babaji himself. but just as i spun around to look, he was gone—*vanished*. i think this was the third time he's visited me in two weeks!! what could it mean?

so, el . . . you're still in bodhgaya, huh? and as miserable as ever. god, you're so stubborn—why didn't you go home? what on earth are you waiting for? it *is* cool that you're hanging out with tibetans, though. when i was 8 or 9 my dad read me a book called "the third eye" by this tibetan mystic named lobsang rampa, who had a hole drilled in his forehead and a splinter of wood stuck into his brain to activate his third eye, immediately giving him all kinds of kickass powers. i think my dad used to carry the book with him in his back pocket during his raging hippie days. tibetans are awesome. but ever since i discovered hinduism, i just can't relate to buddhism at all anymore. it seems so *boring* by comparison. it's probably the only religion in the world that doesn't believe in God. can you believe it? a religion that denies the existence of our immortal, undying soul? buddhists believe in karma, reincarnation, and even in the existence of "deities"—but not in the existence of souls or the one and only God: Brahman, the All-Pervading. it's pretty messed up. sure, they have "emptiness" and "compassion" and "no-self," but where's God and Love and the radiant eternal SELF??

well . . . once again, it's time to say adieu, my lovely sweet ecco girl. maybe i'll see you around someday. in one lifetime or another.

evan

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* *lungi:* a piece of brightly colored silk or cotton cloth that is often worn around the waist in India and Pakistan.

FROM: ELLA PARIS <ELLAPARIS@HOTMAIL.COM>
TO: EVAN MCALLISTER <GLASSYZEN@YAHOO.COM>
DATE: SAT, 08 JAN 2005 11:47:41 (IST)
SUBJ: **RE: BABAJI**

Hi Evan,

Celibacy, huh?! I never realized that emailing me was a potentially erotic experience for you. Has it always been this way? :) I was wondering if your therapist, Jacob, approves of you getting so serious about religion? Personally, I think it's pretty cool that you are meditating two hours a day now. When I was on retreat I was doing at least ten, but we all know what good that did me.

God, I have a terrible hangover today. I was drinking chang last night, it's a kind of beer Tibetans love. Ani gave me some medicine, just balls of herbs that you swallow, but they're not working yet. I have a searing headache and I can't eat anything because I'm so nauseous. To make matters worse it's sooooo noisy and crowded outside at the moment: there are thousands of monks and Tibetans arriving for something called the Kalachakra initiation being held at the end of January. Nearly 200,000 people will be here. Everyone's busy setting up their tents and building huge encampments in all directions that are lit up at night with lanterns. It's like a city is rising right before your eyes, with new "streets" and tent restaurants that will just be gone again in a few weeks. But the smell is getting progressively worse because the bathrooms are just these ditches in the ground. A friend at Shiva's told me that it was so bad one year they had to quarantine the camps because of a typhoid outbreak. I hope I don't catch it, though I don't see how typhoid fever could be any worse than how sick I feel right now.

Tenzin and Ani have made me promise to go to the Kalachakra thing because they say receiving the Dalai Lama's blessing is all

anyone needs to be happy in this lifetime. I'm not so sure, but I suppose even if it doesn't work in this lifetime, it will probably insure I have a happier incarnation in the next one. Someone told me the Kalachakra is actually a Tantric initiation, where they build a huge mandala* of sand and everyone takes vows to become bodhisattvas. It has something to do with world peace and attaining enlightenment for the sake of sentient beings etc. etc.

Oh Evan, I've been meaning to tell you something about your "mysterious" friend from the astral plane, Babaji. My friend Taylor told me she met him last year when she was trekking through Nepal and that he's definitely not enlightened. Just a heads-up.

Love and miss,
Ella

FROM: EVAN MCALLISTER <GLASSYZEN@YAHOO.COM>
TO: ELLA PARIS <ELLAPARIS@HOTMAIL.COM>
DATE: MON, 17 JAN 2005 12:49:58 (IST)
SUBJ: **AWAKENING THE SERPENT POWER**

dear ella,

when i hear about people like your friend taylor, my heart just breaks. the scriptures say that the inability to recognize an enlightened master is the surest sign of extreme unenlightenment. saying babaji isn't enlightened is like saying that thom yorke can't sing, or that laird hamilton is just a surfing poser. it's ignorance,

* *mandala:* a ritualistic diagram of colored circles and squares, symbolizing cosmic forces, that is used in the practice of meditation.

and it's all that's wrong with the human race. in case you're wondering, the only reason i'm writing you back is not out of my own self-interest, but because i had to let you know that your friend is *totally* lost. also, you sound fairly f-ed up yourself. i really feel sorry for you. drinking "chang" will completely cloud up your *nadis* (in case you don't know what those are, they're your body's nerve channels, through which spiritual energy flows). have you ever thought about coming to rishikesh? of course, you and i still can't be together. but this is probably the most spiritual town on the entire planet, and i know it could help you to finally start taking your life seriously. it's like heaven on earth.

recently i started going to the banks of the ganges every morning at 4:00am to practice "pranayama" (which means "breath control"). i've been learning it from a book by a yoga master who used to teach in rishikesh 50 years ago named swami narayanananda. i usually go nonstop for 3 hours, finishing when the other sadhus, yogis, and pilgrims take their morning baths. there's this one dude named ashish—he's about 70 or 80 years old, with long scraggly hair and a lot of missing teeth—and he does pranayama too. he says to me every single morning, as soon as i get out there, that "there is only one reason for pranayama, and it is to attain the great samadhi." he means *nirvikalpa samadhi*, which is the God-realized state of pure bliss consciousness. by controlling your breathing, you can tap into "the breath of life," *prana*. it's the cosmic energy that suffuses all existence, and it manifests in different grades or levels—from electromagnetism to bio-energy to *kundalini shakti*. and that stuff is the most powerful energy of all. in fact, it's sometimes called "the serpent power," because *kundalini* means "snake" and *shakti* means "energy." normally, it all lies coiled at the base of the spine, but by doing pranayama you can wake it up and make it flow into the main nadi, the *sushumna canal* (which runs from the base of your spine to the top of your head). when that happens, prepare to be *blissed out*—because the kundalini will start opening your seven spiritual energy centers, or chakras. i

> God, I have a terrible hangover today. I have a searing headache and I can't eat anything because I'm so nauseous.

> The Kalachakra has something to do with world peace and attaining enlightenment for the sake of sentient beings etc. etc.

haven't had any chakra-opening experiences yet, but i'm practicing hard, and hopefully i will soon.

anyway, i've got to catch lunch at mamaji's before the food gets cold. take care of yourself, ella. at least try to go easy on the tibetan booze, okay?

yours,
evan

FROM: ELLA PARIS <ELLAPARIS@HOTMAIL.COM>
TO: EVAN MCALLISTER <GLASSYZEN@YAHOO.COM>
DATE: THU, 03 FEB 2005 17:23:24 (IST)
SUBJ: **ALL YOU NEED IS COMPASSION**

I may be "f-ed up" but I don't need your pity or condescension. Maybe instead of learning how to breathe, you could ask your swami's and pranayami's and nadiyadi's about this mysterious spiritual quality called *compassion*. Have you ever heard of it? It's only this little thing that makes people *human*. You go on about how I'm not serious and I shouldn't drink. Need I remind you? It was only a year ago that you were doing crystal meth on the beach in Santa Cruz! If you would step down from your yogi pedestal you'd see you're just like everyone else. Unbearable as it may sound, you're like me too. God, I can't believe you don't know about this stuff from your Buddhist phase a couple years back. I went to the Kalachakra for like ten days and *I* figured it out.

Actually the experience was pretty neat, there were tens of thousands of monks everywhere, at times you felt like you were wading through a gigantic pool of maroon and gold. One day I was there I heard the Dalai Lama give a teaching where he was saying that compassion is really the ability to see everyone else as expressions of yourself—that we are all completely interconnected, we're all one. He was saying if we don't live by this truth every moment of our lives we'll never be virtuous or be able to gain merit in this lifetime. Then he told us of this Buddhist saying that goes: "See your needle as mindfulness and knowledge. Thread this needle with compassion and stitch new clothing for all sentient beings." And that's what it's all about Evan! Not serpent powers or energy waves. It's about doing the right thing for the sake of others.

After the Dalai Lama gave his talk this one day, all the monks started chanting in their deep voices "om mani padme hum." Of course I didn't know what they were saying, so I turned around to this Tibetan guy sitting next to me and asked him what it meant. He smiled at me and started explaining that it can't be translated into a simple phrase, but that all the teachings of the Buddha are contained in it, and it's a mantra or "prayer" you recite in order to send blessings to the deity Chenrezig, who's the embodiment of compassion, and on and on.

Meanwhile, this guy is the most remarkable person I've ever set my eyes on. He has gorgeous long black hair in braids down his back, toffee-colored skin, silver bracelets on his wrists and turquoise earrings, and these kind of pale enchanting eyes. It turns out that he is this really experienced student in the Nyingma School of Buddhist Tantra. He lives in Dharamsala most of the time—the home of the Dalai Lama and his people in exile—but often goes into the Himalayas to study and do his practices. We ended up talking for a long time and by the end he invited me to visit him if I ever wanted to go to Dharamsala. His name is Terso.

So that's where I am now! I left Tenzin and Ani a week ago and followed him here. It's beautiful, like a village, and I'm so much happier! Yesterday I finally found Terso sitting in a little restaurant with a bunch of Westerners. He invited me to take a walk with him and after spending hours talking about Tantra, amazingly, he offered to give me my first lesson tomorrow.

Ella

> ashish looked me in the eyes and said, "you fool, this is what happens when you toy with the holy fire!"

FROM: EVAN MCALLISTER <GLASSYZEN@YAHOO.COM>
TO: ELLA PARIS <ELLAPARIS@HOTMAIL.COM>
DATE: FRI, 11 FEB 2005 20:39:16 (IST)
SUBJ: **BURNED BY THE HOLY FIRE**

dear ella,

i just ventured out to this monkey-infested internet café to tell you about an experience that i had and got your surprising email. it's cool to hear about the dalai lama. i'm sorry if i came across as uncompassionate. i probably am. i don't know. i don't know anything anymore.

one morning last week i was doing the alternate-nostril breathing really intensively, determined to get my kundalini to rise up to the seventh chakra. my old sadhu friend ashish was telling me to take it easy, because it can be dangerous to go too fast, too soon. but i ignored him and just focused more, breathing deeper and deeper, holding my breath for longer and longer periods of time. i wish i had listened to him, though, because soon i started feeling this scorching heat in my lower back and saw these white flashes of blinding light everywhere. after a minute or two, white light was *all* i could see, and i began hearing this swooshing sound that got increasingly loud until it felt like my eardrums were about to burst. and that was just the beginning. as i sat there gritting my teeth, my heart pounding in my chest, it seemed like every cell in my body was starting to vibrate uncontrollably. i thought for sure that i was going to explode into a billion pieces. i almost wished that i *would*, because at least then it would've been over. but it just wouldn't stop. i couldn't even scream for help. and after what seemed like an eternity, i couldn't stand it anymore. i thought i was about to die, so i lurched forward onto the ground and began digging my hands into the earth, grasping the soil tight and begging the energy to "please stop, please stop, please stop, please stop..."

i don't know what happened after that, but the next thing i remember is ashish slapping my face and shaking his head in disdain. he looked me in the eyes and said, "you fool, this is what happens when you toy with the holy fire!" i sat there quietly sobbing on the beach for hours, too terrified to move. eventually i returned to my room at the guest cottage, and i've hardly left since then. i'm too afraid to meditate, let alone try pranayama again, so i just sit in my room all day, feeling scared and confused. i've tried calling jacob, but he refuses to speak with me ever since my mom stopped paying him.

god, this *never* would've happened if my guru had come already. what if i just imagined the whole thing?? what if i'm going crazy, ella? this all seems like a bad dream that just won't end. and i don't how much longer i can go on alone.

evan

p.s. *tantra?!*

———————

To be continued . . .

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Awakening to the blob

Not just a book review of Thomas de Zengotita's *Mediated*

by Maura R. O'Connor

From a very young age, I remember being asked what I wanted to be when I grew up. Always eager to give an answer, I framed my ambitions around the books and movies I loved so much, conjuring up fantastic scenarios in my head and spinning them far into the future. I envisioned myself skipping over waves on a boat with the spray of the ocean on my face as a compassionate marine biologist or making an incision in someone's brain tissue as an accomplished neurosurgeon. Among many other ambitions eventually discarded, I wanted to be a fashion designer following in the footsteps of great artists like John Galliano, and even, bizarrely, a humble carpenter. Okay, I was fanciful, but the reality is that as a young American, any one of these options could have been mine if I had wanted it badly enough.

Options. What parents wouldn't want their children to have them? "You can be anything you want," my schoolteachers told me. "An astronaut, or the first female President of the United States!" And it was (in theory) the truth. Whether we knew it or not, my generation grew up assuming that endless options and possibilities were our birthright. The sense of freedom and entitlement this gave us would have been incomprehensible to past generations. Having reaped the benefits of the struggle for equal opportunity beyond class, gender, race, or sexuality that defined our parents' generation, we were born with an extraordinary privilege: to be the authors of our own destinies, largely freed from past societal norms or traditional forms of morality.

It's no wonder that, like many of my peers, I spent my teenage years transitioning from one subcultural identity to another. Much of the time, I felt unmoored, not really knowing who I was, and so I surfed the options available to me with great fervor. Collegiate indie-rocking brainiac? Nothing stopping me. Bisexual GLAAD activist? Sure, why not. Punk rocker? I tried. Identity crises during college were regular extracurricular activities as we all self-consciously browsed through our optional selves. In fact, self-invention was like a full-time vocation in and of itself, what with all the research and execution that had to be done. But looking back, what strikes me the most is just how early on I became aware that my identity was in my own hands, to be molded and tailored according to my deepest desires—or my fleeting whims. At some point I switched from just experiencing life to seeing life experiences as accessories that would aid in the construction of Me. The music I listened to, the books on my shelves, and my dreams and ambitions—not to mention the interesting combinations of and ironic contradictions between all these things—were like mirrors, reflecting myriad identities back to me.

There's a kind of tragedy in all of this. What my peers and I sought was a lack of pretension, a sense of genuineness, but it consistently eluded us. Unable to find the authenticity we were looking for, we eventually grew cynical and assumed our postures toward life with less and less sincerity. Overwhelmed by more and more options, some of us just opted out.

I experienced a revelation in regard to these matters when I received a manuscript from respected writer Thomas de Zengotita of his new book *Mediated: How the Media Shapes Your World and the Way You Live in It.* Having interviewed Zengotita previously, I was familiar with his ideas. And yet little could have prepared me for what I would find in the pages of his latest work. I discovered that terms and concepts actually exist to describe the experience of growing up in the postmodern era. I discovered that we are living in a mediated world, and I am a mediated girl.

THE CENTRAL FOCUS OF THOMAS DE ZENGOTITA'S *MEDIATED* (Bloomsbury, 2005) is "how the media affects your life and the way you live in it." De Zengotita's work follows in a short but rich tradition of media studies that began with pioneer Marshall McLuhan (1911–1980), often referred to as the "prophet of the digital age." McLuhan once said, "When things come at you very fast, naturally you lose touch with yourself. Anybody moving into a new world loses identity." It was in his first book, *The Mechanical Bride* (1951), that McLuhan began to chart this "new world," recognizing that it was being shaped and created by the forces of swift technological advancement and the rapid spread of new media among widespread populations of people. He believed electronic media were literal "extensions of man," expansions of the individual's nervous system and self-identity that fundamentally changed his or her relationship to the world, and in turn, changed the world itself.

McLuhan also had a vision of a future "global village" (he coined the term) in which there would be no "cardinal center, just many centers floating in a cosmic system which honors only diversity"—a metaphor for the harmonious existence of fully autonomous individuals. Today, we do inhabit a global village, but the utopian promise implicit in McLuhan's vision is far from realized. Indeed, over the last fifty years, our society has become increasingly focused on the individual. This phenomenon was explored by Christopher Lasch in his seminal

mediation mē´•dē•ā´•shən/ n.

1. in general: the process by which reality is experienced through something else.
2. in particular: the process by which real entities fuse with representational entities. examples of various "mediations" of Jesus would include: the Bible, Michelangelo's *Pieta*, Mel Gibson's *The Passion of the Christ*, and his appearances on *The Simpsons*.

book *The Culture of Narcissism* (1979), in which he identified the archetype of the postmodern individual as one who "carried the logic of individualism . . . and the pursuit of happiness to the dead end of a narcissistic preoccupation with the self." In addition to Lasch's and McLuhan's work, books such as Jean Baudrillard's *The Consumer Society* (1970), Umberto Eco's *Travels in Hyperreality* (1983), and Jean Francois Lyotard's *The Postmodern Condition* (1984), made landmark explorations into the social developments of the late twentieth century—a time in which media technology and a high degree of individualism were influencing one another in radically new ways, and at lightning-fast speeds.

Thomas de Zengotita picks up where these authors left off, synthesizing their work to expose the gestalt of postmodernism in an unusually accessible way. *Mediated* portrays the technologically advanced, media-saturated West as a world composed of millions of individual "flattered selves," each living in its own insulated "MeWorld." De Zengotita believes that this narcissism on an epic scale has been engendered and is constantly being nourished by media representations in all areas of our lives, from the most private (videos of one's wedding, photographs of loved ones) to the most public (subway advertisements, television). "Our minds are, as a matter of sheer quantitative fact, stocked with mediated entities," he writes. "Ask yourself: is there anything you do that remains essentially unmediated, anything you don't experience reflexively through some commodified representation of it? Birth? Marriage? Illness? Think of all the movies and memoirs, philosophies and techniques, self-help books, counselors, programs, presentations, workshops . . . and the fashionable vocabularies generated by those venues, think of how all this conditions your experience."

Driven to unprecedented heights of self-consciousness, the postmodern individual's quality of being, according to de Zengotita, is that of a method actor. In a culture saturated with media performances, one's life is informed by representations of "life," thereby becoming a subtly self-conscious performance. To illustrate this point, de Zengotita uses the image of athletes celebrating a victory on television:

> *There's that same element, that same quality in the way those exhilarated men position themselves in front of each other, or the larger audience and the cameras, beefy faces alight with a peculiar blend of exultation and hostility, tendons bulging in their necks, fists pounding the air or curled tight upward at the ends of crook-dangling arms, bodies thrust forward as if to bulldoze past all compromise, apparently frenzied, apparently berserk, bellowing in tones suggestive of profound vindication, bellowing "Yeaauh! Yeaauh! Yeaauh!" And each "Yeaauh" lifts above the preceding one, as if to reinforce it, but also to comment on it, even to parody it, and suddenly you realize, looking into their eyes, beaming out at friends and neighbors in the stands, you realize that this is also a performance, and a contest, a folk art—and oh-so-self-conscious after all.*

We have become, he says, "celebrities all, celebrities at last"—the knowing stars in the self-directed movies of our lives.

De Zengotita writes with an easy brilliance, bringing both a sharp wit and an impressive depth to his critiques. For the past six years, he has been a contributor to *Harper's* magazine, writing feature articles that delve into pop culture with the sort of intellectual rigor usually reserved for the lecture halls of academia. (He has, in fact, taught philosophy at New York University's Draper Program for nearly a decade.) His style has always been to use the language and metaphor, the humor and spirit of contemporary culture as a kind of Trojan horse for his philosophical ideas, and this new book is no exception. *Mediated* explores both the truisms and the subtle idiosyncrasies of our postmodern age, waltzing from seemingly disparate topics like children's literature, society's loss of heroes, Bill Clinton, the epistemology of the word "whatever," blogs, middle school, cloning, and the Weather Channel to Nietzsche, John Locke, and Plato. Most readers will undoubtedly recog-

method acting meth´•əd ak´•tŋ/ n.

1. a philosophy of acting that rejects "acting." it strives for psychological truth and trains actors to be real and live in the moment. 2. associated originally with Stanislavsky and then with Lee Strasberg of the Actors Studio who taught Marlon Brando, James Dean, Robert Duvall, Robert De Niro, and Sean Penn.

nize some aspect of themselves in nearly every page, and it can be an alternately enlightening and terrifying reflection. Indeed, at one stage of the writing process, in defiance of the growing market for self-help literature, de Zengotita considered using this cover blurb for *Mediated*: "If you're looking for a book to make you feel good about yourself, and show you how you can feel even better about yourself, this isn't it."

The actual process of mediation takes place, de Zengotita explains, when what is real is represented through any form of media (think of anything from a home video to a multimillion-dollar biopic). As representations grow in variety, sophistication, and intensity, they create what he calls a "psychic sauna" of experiences, sensations, and options that we glide over the surface of, like "a little god, dipping in here and there. . . ." In a mediated world, the flattered self is the center of the universe—the consumer, the viewer, the holder of the remote control—able to opt in or out whether it be in regard to a television set or reality itself. And indeed, technological advancements make it harder and harder to even tell the difference between the two. (Take a movie like *Troy*, where it's impossible to distinguish the real sets, which are themselves representations of the real city of Troy, from the computer-generated ones.) And as the flood of representation becomes faster, more sensational and ubiquitous, we rarely even make the time or effort to distinguish between what is real and what is synthetic, simulated, or replicated. Nowadays, as de Zengotita puts it, it's as if "the feel of the virtual is overflowing the screens, as if the plasma were spreading into the physical world." Mediation, he argues, is leading to a fusion of the real and the representational.

Mediated's most significant contribution may be its insights into the existential price we pay as mediated people. De Zengotita writes that the "moreness of everything," the sheer increase in the volume of media vying for one's attention, leads to adaptations in the psychic life of the human being. Because

me world mē wʉrld/ n.

1. the world constructed by an individual selecting from the options available to them.
2. largely responsible for the postmodern belief that "everyone has their own reality, constituted by their own experiences and perceptions."

flattered self, the

flat´•ərd self, thə/ n.

1. you. you are hard-wired to respond to attention—and to think how much you get. 2. the viewer, the reader, the consumer, the customer, and the voter. 3. the target of all representations—movies, documentaries, photographs, television, books, newspapers, billboards, advertisements, brands, and themed settings.

individuals can only register a certain amount of information in any given moment, the bombardment of media images gives rise to defense mechanisms such as apathy and indifference. Constant exposure to representations creates a "thinness to things, a smoothness, a muffled quality—it's all insulational, as if the deities of Dreamworks were laboring invisibly around us, touching up the canvas of reality with digital airbrushes. . . . Ever notice how," de Zengotita asks, "when your hand is numb, everything feels thin? Even a solid block of wood lacks volume and texture. You don't feel the wood; your limb just encounters the interrupting object. Numb is to the soul as thin is to the field of representational surfaces."

Another consequence of growing up in a world of mediation, of always feeding on the "irresistible flattery that goes with being incessantly addressed" by representations, is that one becomes spoiled. The flattered self, de Zengotita writes, "never gets enough. It feels unappreciated. It whines a lot. It wants attention." In some of the most humorous yet tragic passages in the book, de Zengotita invokes the ethos of the flattered self to weigh in on the discussion. For instance, in a chapter entitled "Twilight of the Heroes in a Teenage World," he writes, "Take the Big Thinkers. Plato? Augustine? Descartes? Kant? It suddenly hits you. The sheer brass of those guys, pontificating about the ultimate nature of reality and the proper purpose of *our* lives. I mean, who did they think they *were*? Don't get me wrong, it's fine to put them in books and teach courses about them and stuff, so long as it doesn't get out of hand, so long as they don't impose on the rest of us who are busy exploring our own options, choosing our own philosophies, our own lifestyles."

De Zengotita files all the various phenomena and effects of mediation under what he calls "the Blob," also the name of Steve McQueen's 1958 debut flick (obviously, de Zengotita is not beyond a little mediation himself). The Blob serves as his metaphor for postmodernism, a word that is infamously hard to define. "Anything more specific couldn't possibly do justice to the process of mediation," he writes. "It proceeds so variously. It works on a case-by-case basis. It comes from all directions and no direction. Nothing is too great for its textured ministrations. Its elasticity is without limit, its osmotic processes calibrated to enfold the tiniest, most private gestures of your secret life and contain your sense of the universe and the meaning of love and death as well."

There are times, de Zengotita admits, when something will threaten the Blob's supremacy—something that seems real enough, or "sharp enough, as if it might pierce the membrane and slice the pulp." (Recent examples are 9/11 and the abuses at Abu Ghraib.) "But no," he writes. "Watch as the media antibodies swarm to the scene of those nascent interruptions. These are the junctures that require the most coverage—and the latent meaning, the ironic dialectic implicit in that word, emerges. What must be *covered* is any event or person or deed that might challenge the Blob with something like a limit, something the Blob cannot absorb. . . ." To these challenges the Blob will "devote some extra time . . . but in the end it prevails. And how is the moment of its victory marked? By your indifference. That's the signal to move on, the signal for the Next Thing to appear. That's when the original of the real thing has been fully mediated. It becomes representational, and that means optional."

moreness of everything, the

môr´•nis uv ev´•rē•thŋ, thə/ n.

1. the increase in the volume and variety of mediated options vying for one's attention, from cereal box covers to political causes. 2. something that forces adaptations in the psychic life of human beings, who can only register a certain amount of information in any given moment; leads to coping mechanisms, such as irony, apathy, and indifference, but also fanatical niche commitments, from gamer worlds to religious sects.

If you're beginning to find this a tad depressing—it is. As you near the end of the book, having recognized that you are a perpetual motion machine of self-reflexivity and inauthenticity, that in fact we're all method actors coddled by a pervasive Blob of virtual reality, it is hard not to start feeling a little down. The soul-eroding powers of mediation begin to seem inescapable,

blob, the bläb, thə/ n.

1. a metaphor for postmodernism. 2. an attempt to encompass the manifold phenomena and effects of mediation. the Blob's function and aim are to absorb what is real into representation, endlessly fulfilling the process of mediation. 3. a fount of paradox and ambivalence.

and in the last chapters, just as you begin to pray for a way out, de Zengotita offers none. Instead, he makes the case that "bogus predictions and lame solutions" have become a genre requirement of social critiques everywhere. Every newspaper column, op-ed piece, book, or article includes a "technological fix." But these fixes, he argues, aren't so much real solutions as they are aesthetic conventions allowing the reader to feel good and move on to the "Next Thing," continuing the cycle of consumption. The truth, de Zengotita declares, is that our world is like a fishtailing car on a snowy road: "Things have been getting bigger and faster and more complicated so quickly, for so short a time—and most of what is now happening is happening for reasons no one can fathom. That's about all you can say. So far, we've survived." He explains that he "hates to be a drag," but maybe "prediction/solution conclusions persist because they are like that rising tide of music at the end of the movie, the surge of strings that elevates the camera as the expanding horizon shot opens up around the protagonists and gives you that tied-up-in-a-bow feeling to take home with you."

Despite the truth of this argument, it's hard not to want a solution to mediation. We are living in a world on the brink of disaster on every level—environmental, political, humanitarian. Perhaps the worst effect of mediation, indeed the *luxury* of mediation for those of us who have the ability to author our own beings, is that it has become the insulation protecting us from the extremity of our privilege and narcissism in relationship to the rest of the world. Residing as we do in a "psychic sauna" of representations, we remain buffered from the reality of a planet in crisis.

With so much at stake, does de Zengotita really mean to say that it's impossible to transcend mediation? If the Blob's elasticity is without limit, does real authenticity no longer exist? Does he believe that we are inescapably condemned by the historical forces of postmodernism? As I pondered these questions, I felt a personal stake in the answers. Having been born into a mediated world, I'd like to think that I'm not forever doomed to feel "nostalgia for the real," but that authenticity is attainable, that the further reaches of my soul don't always have to be, as de Zengotita writes, "on permanent remote." Unable to find the answers in the pages of *Mediated*, however, I decided to consult the author himself.

"Hello, Mr. de Zengotita."

"Hi, kiddo."

"I want to start by saying that I found your book incredibly enlightening. You've perfectly articulated my experience of living in the postmodern world, in a culture of optionality and mediation. And I think that many people my age and older are going to feel the same way."

"I hope so." (Laughs)

"But I also don't know where it leaves someone like me. I got the sense from the book that once you're a mediated person, it's impossible not *to be one; that it's inescapable. Do you think it would actually be impossible for me to transcend mediation?"*

virtual revolution

vʉr´•choo•wəl rev´•ə•loo´•shən/ n.

1. what happens when technological venues multiply and mediated spectators move to replace celebrities and stake a claim on their own attention (e.g., Princess Diana's mourners, reality shows, podcasting, Howard Dean supporters, karaoke, blogs, etc.)

"Well, I know a few young people who are serious about this, struggling with this same question, and my gut tells me they've got a shot. And you're certainly one of them. I always have to say that one of the things about an authentic life, as far as I see it, is that the first step is understanding the condition. And mediated is a serious diagnosis. The real answer to your question is that this is a task for you. I will give you every hint and insight I can give, but you're the young people. I'm an old guy. This is up to you."

"But it's devastating because the book exposes the truth so clearly, yet there's no path to the solution. I mean, once you understand the condition, how can you go beyond it?"

"You just have to not be afraid in this state. Everything significant that has ever come to me intellectually or spiritually has come from this devastated state. That's all you need; it's an openness. You can't be in an ordinary frame of mind because then, when answers come along, you won't even recognize them."

"That's really interesting. It just struck me that this state of desperation that comes from recognizing the truth is itself a place of authenticity."

"For sure, kid—I mean, that's what existentialism is all about! I made a conscious decision about the dark, hopeless quality in this book. Most people don't want to read something if they can't feel some bogus feeling of resolution at the end, and I decided that whatever else I was going to do, I wasn't going to do that. I chose a certain role, or voice, because I don't want to let you out of any trap. But that's the artistic design of the book, as opposed to my lifelong goal."

"Which is what?"

"Anything I can contribute to getting us through this time we're in. Because we can't go back; we have to go through the state we're in to get to new forms of authenticity. That's why I put the burden on your shoulders, Maura. It's always the old guys who get to say gnomic things, but the young people have to *do* something. And I don't mind leaving you devastated; because I think that if you're the real deal, that's the way you need to be. That's when the next step will come to you." ■

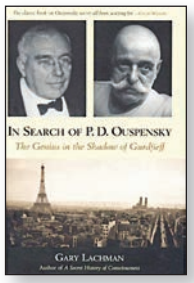
optionality

äp´•shən•al´•ə•tē/ n.

1. the freedom of the postmodern person to choose among an endless array of options with everlasting mobility. 2. the fact that whatever one has chosen can always be un-chosen.

natural selection

BOOKS • FILM • OTHER MEDIA



IN SEARCH OF P.D. OUSPENSKY
The Genius in the Shadow of Gurdjieff
by Gary Lachman
(Quest Books, 2004, hardcover $24.95)

"In 1915, a man of uncertain origin appeared in Moscow and gathered a core group of followers, students of his strange and unsettling system of esoteric doctrine and psychological development." So begins Gary Lachman's fascinating exploration of the life of a towering Russian intellectual of the late nineteenth and early twentieth century, P.D. Ouspensky. However, that opening sentence refers not to Ouspensky himself but to his teacher—the man whom he introduced to the Western world and who became one of the most famous, and infamous, spiritual figures to arise out of those fertile times: George Gurdjieff.

Lachman's book carefully chronicles Ouspensky's early days in St. Petersburg, his brief career as a popular and promising young Russian author, his spiritual seeking for what he termed the "miraculous," and his first meeting with Gurdjieff, described as a "man of oriental type . . . with a black mustache and piercing eyes." Three decades later, those "piercing eyes" would become known all over Europe and the U.S. But in Russia in 1915, Gurdjieff was just beginning to teach, and in the young Ouspensky, he met an intellectual aristocrat who would follow his work as a close disciple for a number of years and be profoundly influenced by it for the rest of his life.

In Search of P.D. Ouspensky is, in the most basic sense, a story of the student-teacher relationship, writ across the backdrop of the chaos of Russia and Europe in the early twentieth century. It follows Ouspensky's journey through his various phases, as journalist, author, seeker, student, and eventually teacher, and closely examines the development of his relationship with his enigmatic mentor. In Gurdjieff, Ouspensky saw someone who had authentic knowledge of the "miraculous," a teacher who was experimenting with radical new methods to try to awaken his students, and a larger-than-life figure who clearly possessed mystical and occult wisdom. Reading Lachman's descriptions of Gurdjieff's initial work with his first small group of students in St. Petersburg, one gets a sense of how cutting edge his teachings were for the time. Gurdjieff saw his work as presenting a new path to higher consciousness. Traditionally, he explained, there had been three paths: the way of the fakir (a path involving mastering one's physical body), the way of the monk (a path of devotion), and the way of the yogi (a path of understanding). Now, he was introducing a new path to the world, which he called the "Fourth Way," or the "way of the sly man." Though Lachman is vague on details, he describes the way of the sly man as one that involves obtaining a secret knowledge elusive to most. According to Gurdjieff, this path was different from many traditional approaches in that it was to be practiced in the world, but in the context of a relationship with a teacher and a group of fellow aspirants. And before one could walk this new path, he told his students, one had to realize the desperate circumstances of man's normal state of consciousness. "To awaken," he explained, "means to realize one's nothingness, that is, to realize one's complete and absolute mechanicalness." Ouspensky was fascinated by this notion that man, as he is, is nothing more than a machine, and he felt that in Gurdjieff's work, he had found an escape route from the desperate circumstances of human life—circumstances that were particularly difficult in early-twentieth-century Russia, as the country boiled in the turmoil of war and revolution.

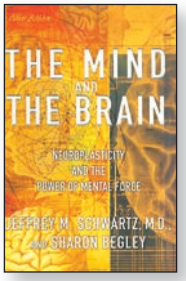
Despite the powerful impression that Gurdjieff's "Fourth Way" made on this young Russian intellectual, and the extraordinary things he experienced under Gurdjieff's tutelage, eventually Ouspensky became disillusioned—not with the teaching, but with the teacher himself and his often unpredictable and erratic behavior. Yet the two maintained a close, if somewhat contentious, connection, communicating and corresponding regularly until Ouspensky's death in 1947. And ultimately, he would do more to spread Gurdjieff's innovative ideas than any other person in the last century. If you know anything about the work of Gurdjieff, in some small way you owe a debt to P.D. Ouspensky.

Lachman has a gift for illuminating the historical context around the story, and he conveys a powerful sense of this unique time of spiritual experimentation, when the mystical East was first infiltrating the intellectual sensibilities of the affluent West. And he throws in some fascinating facts as well. For example, who knew that Ouspensky met Sri Aurobindo in India when the great Indian sage was just starting his work? Or that a character in one of Aldous Huxley's novels is based on Ouspensky? In fact, the only disappointing aspect of this book can't really be blamed on Lachman at all. It is that the tale of these two larger-than-life figures, like the early twentieth century itself, started out with great promise, only to end up in tragic circumstances. Indeed, both lives finished on sour notes, two powerful spirits seeming to falter even as they gained greater and greater limelight.

Both Ouspensky and Gurdjieff ended up facing a lonely twilight to their careers—diminished figures, full of brilliance perhaps, but whose minds and bodies had been ravaged by time and alcohol.

Yet whatever fault history may find with Ouspensky and Gurdjieff, Lachman's work also reminds us of their boundary-breaking heroism. They were at the vanguard of one of the first generations to take upon its own shoulders the challenge of refashioning the spiritual life for a post-traditional, global world. And we are all still in the midst of that ongoing challenge. From this perspective, the particular successes and failures of their teachings fade, and one stands in awe at the willingness of both these men to step out into the unknown and take the risk to see the world in a new way.

Carter Phipps



THE MIND AND THE BRAIN
Neuroplasticity and the Power of Mental Force
by Jeffrey M. Schwartz, M.D., and Sharon Begley
(Regan Books, 2002, paperback $14.95)

Displaying a rare combination of scientific heft and uncommonly readable prose, Jeffrey M. Schwartz, M.D., and Sharon Begley have written a book that debunks materialism and brings Buddhist mindfulness to the forefront of scientific inquiry. In *The Mind and the Brain: Neuroplasticity and the Power of Mental Force,* Schwartz and Begley wrestle mainstream neuroscientists to the ground and provide convincing proof that mindful awareness is, literally, a force to be reckoned with.

Schwartz, a noted psychiatrist and expert in brain dysfunctions, and Begley, a multi–award-winning former senior editor for *Newsweek* (currently science editor for the *Wall Street Journal*), contend that "the mind" is not merely a brain-generated illusion but is in fact integral to physical brain function and change. Weaving Schwartz's remarkable and innovative research on brain activity and the treatment of obsessive-compulsive disorder (OCD) throughout the discussion, the authors present a compelling case to argue that the brain can adapt and change as a result of the application of mental force and the influence of free will.

Schwartz has proven, using PET scans taken before and after ten weeks of mindfulness-oriented cognitive behavior therapy, that willful effort of the mind can and does change the physiology of the brain. That is, directed attention can actually alter neurological pathways. How is it that mindfulness can effect such change? Schwartz and Begley turn to quantum physics for answers. Quantum theory holds that "there is no 'is' until an observer makes an observation." Instead, there are only probabilities of what any given thing could be, what form it could take, where it could be located, how it could act—until someone asks those questions and notes the results. Classical, or Newtonian, physics, on the other hand, is deterministic, maintaining that the physical world is made up of particles that act on each other, thus causing events (on which the observer has no influence).

Quantum theory creates what physicist Henry Stapp refers to as "a causal opening for the mind, a point of entry by which mind can affect matter, a mechanism by which mind can shape brain." In doing so, quantum theory allows us to consider mindfulness in the search for new treatment alternatives for mental illness. It also validates a basic tenet on which human society is based—that each

individual is responsible for his or her behavior.

The application of quantum theory in this context opens the door to free will and keeps it ajar for morality and responsibility. As Schwartz and Begley state, "This is why effort of attention is . . . the essential core of any moral act." Closing with some thoughts on Buddhist philosophy, the authors state that "the power of habit can greatly increase the functional effects of the power of karma [volitional action]," lending spiritual credence to their scientific proof that mindfulness can and does change brain function: "Habituating by constant repetition" causes the effects of the subsequent karma [volitional action] to "gain greater and greater proficiency, energy and force—just as one who reads a lesson many times becomes more proficient with each new reading."

The will has powers that, at least in the West, have been radically underestimated in an ever more technological and materialistic culture. Perhaps, as these discoveries about the power of directed mental effort to systematically alter brain structure and function attract public awareness, we will give greater weight, instead, to the role of volition.

Joyce Sherman

Joyce Sherman is managing editor of *Frontiers of Health Services Management* and senior editor at Health Administration Press in Chicago.

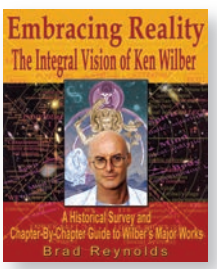
HIP: THE HISTORY
by John Leland
(Ecco, 2004, hardcover $26.95)

Being hip is something you most likely associate with Muhammad Ali's poetic jive or Miles Davis's musical genius, but these days it's becoming ubiquitous. Retail giants peddle it, the mass media co-opts it, and the internet takes it out of the hands of a few and makes it available to everybody. The author of *Hip: The History*, a book that traces the evolution of "hip" over the past four hundred years, sees this democratization of hipness as the latest development in America's great "unplanned social experiment."

John Leland, *New York Times* journalist and ex–punk rocker, begins his chronicle by taking us back to the year 1619, when the first slaves were brought to America—among them, members of the Wolof tribe of West Africa. The word "hip" is derived from their verbs *hepi*, "to see," and *hipi*, "to open one's eyes." For the African slaves on American plantations, hipness was a "subversive intelligence that outsiders developed under the eye of insiders," a necessary means of self-survival. Throughout history, Leland convincingly argues, hipness has meant the possession of a kind of "enlightenment" or "awareness" much like the earliest slaves had. For Leland, this awareness is the connective tissue between otherwise unrelated figures such as Mark Twain, Louis Armstrong, and Richard Pryor, or Bugs Bunny, Walt Whitman, and Charlie Parker, each one a nonconformist telling a common story of "America's other appetite, not for wealth but for autonomy." Indeed, being hip elevates an individual or group above the status quo, allowing them to push the edge of their historical circumstances and become a player in the evolution of culture and collective consciousness.

Leland himself is undeniably a bona fide hipster hailing from the East Village, as well as a captivating storyteller and masterful scholar. *Hip: The History* includes a thirty-page index with references to the work of everyone from Robert Wright and the rapper "Too Short" to Chuang-tzu and Tom Verlaine. The book's philosophical undercurrents are as intellectually stimulating as its wealth of trivia is riveting, and its insights and illuminations reveal previously unexplored depths in American history as well as a universal human romance with creativity, truth, and innovation. Indeed, as Leland writes, it is our individual quest for authenticity that "binds millions of us together in a paradoxical desire to be different." Only the superbly square could pass it up.

Maura R. O'Connor



EMBRACING REALITY: THE INTEGRAL VISION OF KEN WILBER
A Historical Survey and Chapter-by-Chapter Guide to Wilber's Major Works
by Brad Reynolds
(Tarcher/Penguin, 2004, paperback $24.95)

An ambitious and significant project, *Embracing Reality* attempts to map Ken Wilber's entire body of published writings in around four hundred pages. Brad Reynolds, who has studied directly under Wilber for over ten years, organizes his "comprehensive concordance and study guide to Ken Wilber's vast 'integral vision'" chronologically, one chapter for each and every one of Wilber's books. He also includes a detailed biographical and philosophical introduction, numerous diagrams and charts from Wilber's books, and a full bibliography.

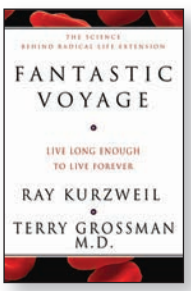
In a short forward, Wilber himself states that while he cannot endorse any analysis of his own writings for correctness or accuracy, Reynolds has "done an extraordinary job of reading,

categorizing, and explaining my work." *Embracing Reality* presents his summaries of Wilber's books at three different levels of detail: a short two-page summary of the whole book; a more detailed, condensed overview of each chapter; and most detailed of all, a chapter-by-chapter summary. The book is liberally sprinkled with Wilber's words—in fact, almost every other line is a direct quotation. And throughout, Reynolds remains faithful to the original texts, presenting Wilber's ideas straightforwardly without adding his own interpretations.

Primarily a reference work, *Embracing Reality* is probably not the book to read if you're looking for an introductory primer on Wilber. A useful approach might be to read the summaries alongside the originals to aid in understanding or recollection. For those wishing to step back and consider the work as a whole and its historical unfolding, the introduction is a great place to start. And for more advanced students, Reynolds also explains Wilber's development through the five commonly understood phases of his work.

"I hope this effort will further crystallize the universal integral vision," Reynolds writes, "and will serve the eternal truth . . . pointed to within the world's esoteric spiritual traditions." Because it helps to consolidate that vision, *Embracing Reality* will be of serious interest to Wilber scholars and general readers alike.

Ravi Agarwal



FANTASTIC VOYAGE
Live Long Enough to Live Forever
by Ray Kurzweil and
Terry Grossman, M.D.
(Rodale Books, 2004, hardcover $24.95)

Welcome to the material world—forever! This book, a collaborative effort between author, inventor, and all-purpose genius Ray Kurzweil and life-extension expert Terry Grossman, M.D., is an outrageous journey to physical immortality. The authors lend credence to a topic once reserved for the deluded by resisting the urge to speculate, instead offering a host of scientific data and practical advice.

Fantastic Voyage presents a road map of three "bridges" that Kurzweil and Grossman claim will allow us to traverse the path to deathlessness and live long enough to live forever. Ninety percent of the book is dedicated to the first bridge, a longevity program that includes a carefully researched summary of the latest nutritional and lifestyle information and emphasizes aggressive nutritional supplementation to slow the aging process enough to help the aspiring immortal reach the second bridge.

Second-bridge technologies will arrive via the biotech revolution, and most are expected to be available in the next decade. Included in this spate of stunning innovations are neural implants that communicate with the brain to turn off various diseases and bioengineered vampire bat saliva designed to break up blood clots. The list goes on. Essentially, these breakthroughs should halt the aging process and bring us to the third bridge—nanotechnology and artificial intelligence.

According to Kurzweil and Grossman, this third bridge will allow us to completely reengineer the human body, rendering it physically immortal. Even now, nanorobotic blood cells are being designed to enhance the blood's ability to process oxygen by a thousandfold and to destroy infections within seconds of their entry into the human body. The more one reads of these mind-bending advances, the less preposterous physical immortality begins to sound.

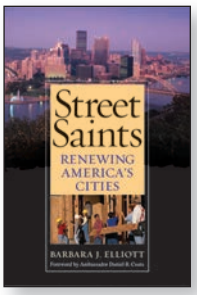
If one takes all of this seriously, one is immediately confronted with a panoply of ethical issues—issues on which the authors remain surprisingly mute. Of course, an ethical consideration of the long-term implications of these technologies may be beyond the scope of this book, but should it be? After all, what would it mean if human beings actually attained immortality? How would this impact population and the logic for having children? What about the divide between the haves and the have-nots? The authors' longevity program isn't cheap—will the rich become immortal, accrue ever more wealth and power, and lord it over a less fortunate mortal slave race? Furthermore, when almost everything in a human being becomes replaceable, what will being human mean, anyway?

The fact that the authors didn't dedicate at least a fraction of their

copious genius to a short consideration of these topics is significant. For those of us lost in the culture of narcissism, the prevailing ethic appears to be "what's good for me is good for me," and this ethic clearly pervades *Fantastic Voyage*. Perhaps in our fascination with technology, we have lost sight of a larger picture—one that might even include a spiritual dimension in which death is not a catastrophe, as the authors flatly assert, but just one part of a vast evolutionary process.

That being said, I must admit that I plan to pass *Fantastic Voyage* along to all my loved ones, and thereafter race to the health food store to stock up on my supplements as per the authors' suggestions—if for no other reason than to endeavor to be around long enough to see how many of their prognostications come to pass.

Michael Wombacher



STREET SAINTS
Renewing America's Cities
by Barbara J. Elliott
(Templeton Foundation Press, 2004, hardcover $24.95)

In *Street Saints*, Barbara J. Elliott introduces us to the heroic efforts of some of the individuals involved in delivering social services to American inner cities. In researching her book, Elliott found that many of this country's sick, poor, and disadvantaged are cared for by 350,000 different congregations spending over $36 billion annually. And behind many of these organizations is a single human being whose spirit has been consumed by a conviction so strong that it gives them the power to transform individuals, communities, and even cities.

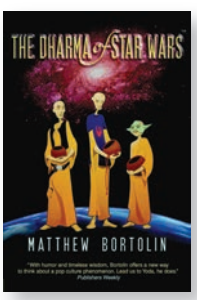
Among these "street saints" is Kirbyjon Caldwell, who, after being called by God to leave his fast-track Wall Street life, converted to the ministry and transformed a congregation of twenty-five members into what he calls a "lean mean Kingdom-building machine." Caldwell went on to establish the Power Center in Houston, Texas, a multifaceted holistic service provider that includes a bank, a healthcare center, and a K–8 school. Today, the center serves thousands of people monthly and pumps $17.5 million annually into the local economy. It was also the original source of President George W. Bush's deep con-

fidence in the potential of faith-based initiatives.

Elliott goes on to profile a large number of social programs and the people who run them. People such as Cordelia Taylor, an African-American whose heart was imprisoned by hatred after her father was murdered by two white men until the day God told her that she had to do it His way and not her own. She left the suburbs, returned to the city, and stood down drug lords to start a thriving home for the elderly. Brian King, a former gang-lord himself, found his own way off the streets and then returned like a "green beret" back into those dark holes to pull others out. At the conclusion of the book, Elliott recounts a fascinating history of religious service work in America, and finishes with an impassioned plea for true spiritual maturity in this world filled with such dire need.

Street Saints is almost solely focused on Christian-based service organizations, and the sheer number of programs discussed may be daunting to the casual reader. Still, its stories of conversion are tremendously inspiring, and for anyone involved in social work, it is essential reading.

Jeff Carreira



THE DHARMA OF STAR WARS
by Matthew Bortolin
(Wisdom Publications, 2005, paperback $14.95)

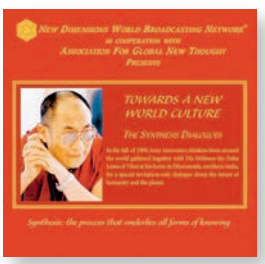
Just in time for the release of *Star Wars: Episode III: Revenge of the Sith,* the final installment of George Lucas's epic space-fantasy saga, a lifelong fan named Matthew Bortolin has produced a treatise that might save a few wayward Jedi from succumbing to the dark side. Called *The Dharma of Star Wars,* Bortolin's two-hundred-page manifesto is an entertaining and surprisingly serious consideration of the major themes, characters, and events of that galaxy far, far away, interpreted through the earthbound lens of Theravada Buddhism.

While easily playing off many of Lucas's obviously Buddhist-inspired ideas (such as Jedi Knights speaking of "mindfulness"), Bortolin really shines in his psycho-spiritual analysis of the six-part series' main character, Anakin Skywalker—better known as the evil "Sith Lord" Darth Vader. He devotes considerable attention to the tale of this unlikely savior, finding him far more interesting than Vader's son, the noble Luke Skywalker, because Vader "embodies the full range of what it means to be human." Beginning his life as a sweet kid in *Episode I,* Vader grows up to become an arrogant, troubled teen in *Episode II,* a murderous "agent of evil" in *Episode III,* and only through the unflagging compassion of his son does he finally renounce his dark ways in *Episode VI*. Through this example of the extremes of human nature, Bortolin unearths a wealth of material for explaining the Buddha's teachings on suffering, ignorance, impermanence, interdependence, compassion, emptiness, and freedom.

It is only at the very end of the book, in an afterword titled "The Jedi and Violence," that Bortolin's well of parallels between Jedi-ism and Buddhism finally runs dry. His struggle to reconcile his ultra-pacifistic Buddhist beliefs with random acts of Jedi violence is interesting, but he seems somewhat at a loss to find examples of Jedi Knights making precision slices with their lightsabers purely out of compassion. Undoubtedly, he would have fared better here by acknowledging that "Jedi warriors" don't merely exhibit characteristics of Buddhist monks but of Taoist masters, Japanese samurai, and Wild West cowboys as well.

Nonetheless, Bortolin's book succeeds as one of the most in-depth investigations into Star Wars likely ever to have been written, and as an excellent introduction to Buddhism as well—at least for anyone who would be more delighted than annoyed by his many obscure Star Wars references. And even though some of his allusions do seem a bit contrived ("Like the twin suns of Tatooine, wisdom and compassion give light and life to the world of darkness"), Star Wars fans and Buddhists alike can thank Bortolin for bringing new relevance to the power of the Force.

Tom Huston



SYNTHESIS DIALOGUES
The Dalai Lama of Tibet and World Leaders of Spirit
(Sunyata Studios, 2004, DVD $29.95)

Jointly produced by the Association of Global New Thought and Sunyata Studios, this DVD captures the fascinating and transformative process of collective inquiry that was embarked upon during the third annual Synthesis Dialogues Conference, held last year in Italy. Over the course of five days, the first two of which were devoted to discussion in preparation for the arrival of guest of honor His Holiness the Dalai Lama, some of the world's most passionately committed spiritual, philosophical, and social leaders from a wide variety

of backgrounds grappled with many of the most critical issues of our time. This film captures the aspirations, concerns, victories, and failures they encountered in the delicate work of interreligious discourse.

The conference's numerous participants included Buddhist and Christian monks, Islamic scholars, Hindu teachers, and representatives of the United Nations and the World Bank. Among the most riveting moments featured on the DVD is the resolution that occurs between Rabbi Marc Gafni and Islamic author Afra Jalabi after a heated discussion on Arab/Israeli issues. Following a long debate, Afra concedes that a complete Palestinian ban on violence would be essential for there to be any real chance for peace in the Middle East. Rabbi Gafni then states that if that were to happen, he feels that Israel should give up Jerusalem to the Palestinians.

Synthesis Dialogues also features numerous interview clips from before and after the Dalai Lama's arrival, including a number of poignant conversations with His Holiness himself. An effective commentary is woven throughout, describing the evolution from conflict to transcendence that ultimately engulfed all participants in an atmosphere of goodwill and profound global optimism. The end result is an inside look at an experiment in dialogue that conveys the enormous potential for interreligious cooperation to create unity among people of vastly different worldviews.

Jeff Carreira

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Your editorial staff used to be one of the best groups of "questioners" I'd ever read. They not only knew how to create and ask questions but also how to question the answers, too, obliging the reader to fall out of his comfort zone, open his mind, question every part of his own knowledge and beliefs, and ultimately either to make up his mind or to simply leave it as was, totally shattered and widened by the experience. I miss being in direct contact with the energy of all the people interviewed as well as that of the interviewers because this diversity was very beneficial in promoting discrimination, reason, and, ultimately, wisdom.

Christine Munson
via email

LOST IN ETHNIC PAIN

Marcos Villareal's indignant interpretation of the meaning of Ken Wilber's statement regarding "egocentric and ethnocentric very much have to die" (Letters, "Too Radical for You") got lost in ethnic pain and identification with that pain. Marcos, I invite you to allow yourself to contemplate for a moment that this same comment was also made by Martin Luther King, Jr. What might he have meant by it?

Sharon Quinn
via email

Issue 27
Nov-Feb 2004/05

REALIZE AND RESPECT

I've just finished reading your latest issue, and I wanted to beam off a huge instantaneous thank-you. To me, it was your best yet, and one from which I learned a great deal. In the past, I have been somewhat critical of a certain "more evolved than thou" tendency, but this seemed to be altogether a more inclusive and holistic affair, as if something of the interfaith spirit of the World Parliament of Religions in Barcelona had really rubbed off on the editors!

Many seekers can fall into the dangerous trap of trashing virtually the whole religious heritage of the past and showing no respect at all to the more traditional mythologies and beliefs that still hold sway with many millions around the world. I think this is symptomatic of the rootless narcissism that predominates in our age. Though it's true that the past holds many terrors and shadows, and sometimes we must struggle to liberate ourselves from past conditioning, we should still, I think, have humility enough to see that these are our roots. And for all the distortion and crimes against humanity committed by religious institutions, there was often a wisdom, a radiant sacred core, that created many noble cultural artifacts and persisted through it all.

To Ken Wilber's "transcend and include," I would add "realize and respect," like the masters who continue to bow down before the *murtis* of their teachers for the rest of their days even after their own radical enlightenment.

Alan Rycroft
via email

SHORTCUTS TO HEAVEN?

In your article on the Kabbalah Centre, which was very well written, you raised the question: Are there shortcuts to heaven? The soul of man has the free-will spark of the Holy One, and as such, is of an order of existence higher than that of the angels; you are in the center of God. Now, you want a tool to transform not only your upper realms of consciousness but also your brother, your community, your world? No matter how many times we climb the mountain of spiritual realization, if we come down with lofty concepts only, we find that the physical and the mundane eventually overwhelms us, for it is ever present. If it is to be harnessed, it must be disciplined.

The Torah has four dimensions of interpretation, from Pshat (the plain meaning) to Sod (the esoteric, mystical, kabbalistic meaning). And if we forget the literal interpretation—the codes, the mitzvot—then we forget where we are. In order to know what the Kabbalah Centre has or has not lost, you must experience the wonders of a Holy Shabbat. There, you will find that no polyphonic cell phones ring, for it is a day of rest from all creation of physical energy. Less traditional forms of Judaism always show their mistake on this one point. They drive on Shabbat. Their cell phones ring. They allow technology into this holy space and render it impure. But the genius of the tradition is that by sticking to the literal (as well as the other three) interpretations of Torah, a day of true rest has been created.

Think on it. No cell phones. No ovens. No TVs. No cars. No radio. No email. No washing machines. No carrying. No physical fire. Just prayer, family, community—uninterrupted song from a non-ending place of joy at being alive, *the fire from within, above, and beyond.*

Robert Lipschitz
via email

COUNT ME IN

What a pleasure to read Carter Phipps' apt description of the Christian men at the Promise Keepers rally. To see this controversial movement, which is presented often in the media as hysterical nonsense, recognized for "taking another approach to men's liberation" moved me deeply. Mr. Phipps' even-handed portrayal never wavered. I felt as though I could pick up the phone and talk to him, or any *WIE* staff member, and we would have a reasoned conversation. His appraisal that "the

messengers were all refreshingly undogmatic and down to earth," and his conclusion that we humans "might all be living in a more enlightened world" thanks to a Christian movement like PK made me want to hug him as a brother (which he is!).

I am a first-time reader of *What Is Enlightenment?* and I am also a born-again Christian. Count me in as one of your own. I, too, am committed to being one more carrier of the flame of enlightenment for this planet—while worshipping the God who loves all of us equally at my Presbyterian church where we sing with shouts of joy every Sunday.

John Howard Prin
via email

FROM SEPARATION TO INTEGRITY

Having spent years living in the oppressive culture of fundamentalist Christianity, I took exception to a number of major points in the article by Carter Phipps about the Promise Keepers because the author seemed to be attempting to give some justification to the fundamentalist way of thinking. For me, the dominant dualistic perspective of fundamentalism—God out there and people down here, us vs. them, our truth vs. their untruth—does not provide an effective means to "exorcise one's demons," and it also does not provide a holistic way to relate to the ills and problems in the larger culture.

From our unconsciousness, we have created our current situation, in which we are riddled with wars, poverty, famine, economic disparity, and rapidly increasing environmental degradation. These growing crises are the outcome of dualistic thinking. As long as we believe that we are separate from God and each other, we inevitably move in the opposite direction from enlightenment, constantly creating anxiety, fear, and distrust. But when we are able to acknowledge our oneness with God and the inherent connectedness of everyone and everything, we begin to step out from under the weight of the illusion that most of us have been suffering through.

I would argue that integrity is earned by challenging our beliefs about separateness and how it is created. In truth, *I* create the separation, because my oneness with God is an absolute. So I am faced each moment with the question of whether or not I am going to choose to separate from God, to step out of the reality that God and I are one. If I can face the truth that this is my choice, and take responsibility for my decision to separate from God, I step into a place of personal integrity. Then I can accept that I am no longer a victim who can blame God or another for my woes.

Nick Meima
Ann Arbor, Michigan

THE MEANING OF EGO DEATH

I have been a subscriber for a long time, and over the years, one of the things that I have disagreed with is the idea that ego is the main obstacle to spiritual awakening. In 1999, I experienced a major shift in consciousness, but at no time did I experience an absence of a sense of self. What I did experience was a very expanded sense of SELF where I could appreciate the recognition that I was not separate from anything. Even though there was no ego death that I could detect, something had taken place that made that recognition possible.

The idea that we must "kill the ego" served for a long time to confuse me in my search for enlightenment, but when I read the "Transcend and Include" dialogue between Andrew and Ken, it helped me to understand and verbalize my own experience. Andrew says that a person must be willing to transcend their protective layers and enter into the intensity of reality, and live life from that point of view, but that most people won't do it because it is too stark. Indeed, this is exactly what happened to me. I overcame my fear because I could no longer tolerate the pain of separation.

Ben Hursh
via email

Issue 26
Aug-Oct 2004

OFFENSIVE TO A THINKING WOMAN

I have only recently found my way to *What Is Enlightenment?* and the edginess of the project you have undertaken is thrilling. In the course of reading my first two issues, I have been introduced to several provocative thinkers and a number of initiatives about which I am delighted to know.

At the same time, I am finding it quite disturbing that the magazine is rather desperately in need of a more diversified point of view. The preponderance of male voices is objectionable because, regardless of how valuable the material is, so long as it is presented from an almost entirely male point of view, it is necessarily lacking in integrity.

This issue went beyond marginalizing women's voices to presenting material that was offensive to a thinking woman. I refer to the quasi-voyeuristic piece on women who sleep with their gurus and to the "Indiana Diddy-Dogg" piece with its scantily clad playmate types. If your interest is in appealing to an exclusively male readership, I expect that you're on the right track. If, however, it's evolution you're after, you can't get there by providing a purportedly inclusive forum in which men converse in the absence of a meaningful female presence.

Michelle Gale
McDonough, GA

ONLINE EXTRAS: For more letters, visit **wie.org/j29/letters.asp**

We, the Unbelievers . . .

by Andrew Cohen

A COUPLE OF YEARS AGO, I DISCOVERED SOMETHING SHOCKING, extraordinary, and completely obvious: Most of us simply don't believe in the evolution of consciousness. And I don't just mean those who are convinced that God created the world in six days. I mean those of us who accept the theory of evolution and who are, at least to some degree, aware of the multidimensional nature of its manifestation all around us. We believe in cosmological evolution and understand that we live not in a static universe but in one that is part and parcel of a deep-time developmental process. We don't doubt that the universe was born many billions of years ago in a blinding flash of light and energy. We believe in biological evolution and have little difficulty comprehending how life itself has evolved from lower levels of development like worms and butterflies to higher ones like dolphins and humans. And many of us even recognize that culture evolves over time and see that development as the expression, at a collective level, of our human capacity for greater and greater complexity and integration. We believe in the evolutionary process because in so, so many ways we can see it all around us: moving, stretching, changing, reaching, from life to death to new life. But when it comes to consciousness—especially *our own*—I have discovered that our conviction in that same process is often nowhere to be found.

We believe in evolution as an objective fact of life and of the creative process *but not necessarily as a living potential inherent in our own subjective experience*. It stunned me when I first realized that even many of us who are already dedicated seekers never consider that our very own consciousness, our deepest sense and experience of our self, could actually evolve and develop. It must be because it is such a quantum leap for the subject to become the object—for consciousness to become the object of its own attention and *intention*. I'm not just speaking about awakening to the experience or fact of consciousness at the level of pure subjectivity, which is what the spiritual experience is typically all about. I'm pointing to something even more difficult to grasp, which is the living potential inherent in consciousness itself for development and growth.

So what does this mean? It means that the feeling/knowing experience of being ourselves can evolve, change, and develop in ways we simply cannot imagine. What is it like for consciousness to evolve? We cannot picture it in the eye of our mind because such development is a journey from the gross to the subtle and is unreachable with thought. How can we possibly imagine that which we cannot conceptualize?

We can imagine our own development as long as we can objectify it with thought. For example, we can imagine ourselves losing weight and building muscle. We can imagine ourselves learning algebra, Chinese, or how to play the guitar. We can even imagine ourselves becoming less selfish and more compassionate. But we simply cannot imagine our own self evolving at the level of consciousness itself. It is important to recognize what an alien concept this actually is in our culture. We are almost never encouraged to grapple with our own evolutionary potential at such a fundamental level, and as a result, most of us have never even considered it. Think about it, just for a moment: *What would it be like for my* self *to evolve in its very essence? What would it be like to develop and grow at a level so profound that I would never be able to see it and yet others would be able to recognize its expression?* If we can even begin to look deeply into this question, mysteriously, we will already be participating in the very evolution of consciousness I've been speaking about. And if we pursue it wholeheartedly, we will be helping to make conscious a miraculous process that was born many billions of years ago in a flash of light and energy and is only now beginning to awaken to itself, through us. ■

Even many of us who are already dedicated seekers never consider that our very own consciousness could actually evolve and develop.

Andrew Cohen, founder and editor-in-chief of *What Is Enlightenment?* has been a spiritual teacher since 1986 and is the author of numerous books, including *Living Enlightenment* and *Embracing Heaven & Earth*. For more information, visit **andrewcohen.org**