Correction Appended: April 2, 2009

Two weeks before Election Day, Barack Obama's campaign was mobilizing millions of supporters; it was a bit late to start rewriting get-out-the-vote (GOTV) scripts. "BUT, BUT, BUT," deputy field director Mike Moffo wrote to Obama's GOTV operatives nationwide, "What if I told you a world-famous team of genius scientists, psychologists and economists wrote down the best techniques for GOTV scripting?!?! Would you be interested in at least taking a look? Of course you would!!"

Moffo then passed along guidelines and a sample script from the Consortium of Behavioral Scientists, a secret advisory group of 29 of the nation's leading behaviorists. The key guideline was a simple message: "A Record Turnout Is Expected." That's because studies by psychologist Robert Cialdini and other group members had found that the most powerful motivator for hotel guests to reuse towels, national-park visitors to stay on marked trails and citizens to vote is the suggestion that everyone is doing it. "People want to do what they think others will do," says Cialdini, author of the best seller Influence. "The Obama campaign really got that." (See pictures of Obama taken by everyday Americans.)

The existence of this behavioral dream team — which also included best-selling authors Dan Ariely of MIT (Predictably Irrational) and Richard Thaler and Cass Sunstein of the University of Chicago (Nudge) as well as Nobel laureate Daniel Kahneman of Princeton — has never been publicly disclosed, even though its members gave Obama white papers on messaging, fundraising and rumor control as well as voter mobilization. All their proposals — among them the famous online fundraising lotteries that gave small donors a chance to win face time with Obama — came with footnotes to peer-reviewed academic research. "It was amazing to have these bullet points telling us
what to do and the science behind it," Moffo tells TIME. "These guys really know what makes people tick."

President Obama is still relying on behavioral science. But now his Administration is using it to try to transform the country. Because when you know what makes people tick, it's a lot easier to help them change.

**The Nudge Factor**

We all know Obama won the election because he looked like change, sounded like change and never stopped campaigning for change. But he didn't call for just change in Washington — or even just change in America. From his declarations that "change comes from the bottom up" to his admonitions about "an era of profound irresponsibility," Obama called for change in Americans. And not just in bankers or insurers — in all of us. His Zen koan, "We are the change we've been waiting for," may sound like New Age gibberish, but it's at the core of his agenda.

In fact, Obama is betting his presidency on our ability to change our behavior. His top priorities — the economy, health care and energy — all depend on it. We need to spend more money now to avert a short-term depression, then save more money later to secure our long-term economic future. We need to consume less energy in order to reduce our oil imports and carbon emissions as well as our household expenses. We need to quit smoking, lay off the Twinkies and avoid other risky behaviors that both damage our personal health and boost the costs of care that are ravaging the nation's fiscal health. Basically, we need to make better choices — about mortgages and credit cards, insurance and retirement plans — so we won't need bailouts down the road.

The problem, as anyone with a sweet tooth, an alcoholic relative or a maxed-out Visa card knows, is that old habits die hard. Temptation is strong. We are weak. We've got plenty of gurus, talk-show hosts and celebrity spokespeople badgering us to save energy, lose weight and live within our means, but we're still addicted to oil, junk food and debt. It's fair to ask whether we're even capable of changing.

See pictures of the best Obama Inaugural merchandise.

See pictures of Obama's college years.

But the latest science suggests that yes, we can. Studies of all kinds of human frailties are revealing how to help people change — not only through mandates or financial incentives but also via subtler nudges that preserve our freedom to make choices while encouraging us to make better ones, from
automatic-enrollment 401(k) plans that require us to opt out if we don't want to save for retirement to smart meters that warn us about how much energy we're using. These nudges can trigger huge changes; in a 2001 study, only 36% of women joined a 401(k) plan when they had to sign up for it, but when they had to opt out, 86% participated.

It's no coincidence that Obama's budget proposes an ambitious program of automatic-enrollment pensions for workplaces that don't offer 401(k)s or that his stimulus package has billions of dollars for smart meters. Behavioral science — especially the burgeoning field of behavioral economics that has been popularized by *Freakonomics*, *The Wisdom of Crowds*, *Predictably Irrational*, *Nudge* and *Animal Spirits*, which is the new must-read in Obamaworld — is already shaping dozens of Administration policies. "It really applies to all the big areas where we need change," says Obama budget director Peter Orszag. ([See the top 10 nonfiction books of 2008.](http://www.time.com/time/printout/0,8816,1889153,00.html)

Orszag has been an unabashed behavioral geek ever since he read that 401(k) study. His deputy, Jeff Liebman of Harvard, is a noted behavioral economist, as are White House economic adviser Austan Goolsbee of the University of Chicago, Assistant Treasury Secretary nominee Alan Krueger of Princeton and several other key aides. Sunstein has been nominated to be Obama's regulatory czar. Even National Economic Council director Larry Summers has done work on behavioral finance. And Harvard economist Sendhil Mullainathan is organizing an outside network of behavioral experts to provide the Administration with policy ideas.

Obama has a community organizer's appreciation for human motivation, and his rhetoric often sounds as if it's straight out of a behavioral textbook. He has also read *Nudge*, which inspired him to pick his friend Sunstein — best known as a constitutional scholar — to run the Office of Information and Regulatory Affairs, the obscure but influential corner of the Office of Management and Budget where federal regulations are reviewed and rewritten. "Cass is one of the people in the Administration he knows best," says Thaler, the founder of behavioral economics and co-author of *Nudge*. "He knew what he was doing when he gave Cass that job." ([See who's who in Obama's White House.](http://www.time.com/time/printout/0,8816,1889153,00.html)

The first sign of the behavioralist takeover surfaced on April 1, when Americans began receiving $116 billion worth of payroll-tax cuts from the stimulus package. Obama isn't sending us one-time rebate checks. Reason: his goal is to jump-start consumer spending, and research has shown we're more likely to save money rather than spend it when we get it in a big chunk. Instead, Obama made sure the tax cuts will be paid out through decreased withholding, so our regular paychecks will grow a bit and we'll be less likely to notice the windfall. The idea, an aide explains, is to manipulate us into spending the extra cash.
Obama's efforts to change us carry a clear political risk. Republicans already portray him as a nanny-state scold, an elitist Big Brother lecturing us about inflating our tires and reading to our kids. We elected a President, not a life coach, and we might not like elected officials' challenging our right to be couch potatoes. Obama's aides seem to favor nudges that preserve free choice over heavy-handed regulation, an approach Thaler and Sunstein, the co-authors of *Nudge*, call "libertarian paternalism." But it's still paternalism, and Sunstein will have the power to put it into action. The idea of public officials, even well-meaning ones, trying to engineer our private behavior to produce change can seem a bit creepy.

But face it: Obama is right. Our emissions are boiling the planet, and most of our energy use is unnecessary. Our health expenditures are bankrupting the Treasury, and most of our visits to the doctor can be traced to unhealthy behavior. We do need to change, and we know it.

So why don't we? And how can we? The behaviorists have ideas, and the Administration is listening.

See pictures of the civil rights movement, from Emmett Till to Barack Obama.

See pictures of Sasha and Malia Obama at the Inauguration.

**Economics for the Real World**

Obama has pledged that his bank-regulation overhaul would be based "not on abstract models ... but on actual data on how actual people make financial decisions." That's a plain-English way of saying it will be guided by behavioral economics, not neoclassical economics.

Neoclassical economics — another University of Chicago specialty — has ruled our world for decades. It's the doctrine that markets know best: when government keeps its hands off free enterprise, capital migrates to its most productive uses and society prospers. But its elegant models rely on a bold assumption: rational decisions by self-interested individuals create efficient markets. Behavioral economics challenged this assumption, and the financial meltdown has just about shattered it; even former Fed chairman Alan Greenspan confessed his Chicago School worldview has been shaken. "We couldn't have planned a better marketing campaign for behavioral economics," MIT's Ariely quips. ([See the best business deals of 2008.](http://www.time.com/time/printout/0,8816,1889153,00.html))

Behavioral economics doesn't ignore the market forces that were all-powerful in Econ 101, but it harnesses forces traditionally consigned to Psych 101. Behaviorists have always known we don't really act like the superrational *Homo economicus* of the neoclassical-model world. Years of studies of...
patients who don't take their meds, grownups who have unsafe sex, and other flawed decision makers have chronicled the irrationality of *Homo sapiens*. Some of our foibles are quite specific, like overvaluing things we have, overeating food in larger containers and overestimating the probability of improbable events — the quirk that made the Meet Barack Obama fundraising lottery such a smart idea. But in general, we're ignorant, shortsighted and biased toward the status quo. We're not as smart as Larry Summers. We procrastinate. Our impulsive ids overwhelm our logical superegos. We plan to lose weight, but ooh — a cupcake! We're especially irrational about money; we'll pay more for the same thing if we can use a credit card, if we think it's on sale, if it's marketed with photos of attractive women. No wonder we apply for mortgages we can't afford. No wonder our bankers approve them.

"We truly want to make better choices," explains Yale economist Dean Karlan. He's a co-founder of [stickK.com](http://www.stickk.com), where users make binding "commitment contracts" to forfeit money to friends or charities — or even "anti-charities" they despise — if they fail to quit smoking, lose weight or meet other goals they set for themselves. "But we need help to get us there."

**The Need to Know**

The first step is knowledge. Studies suggest that better information — from public-service announcements, appeals by respected figures, even serial dramas to help reduce teen pregnancy and other social ills in developing countries — can assist us in making better choices. There was a run on energy-efficient lightbulbs after Oprah urged viewers to buy them; similarly, Michelle Obama's White House vegetable garden is intended to urge us toward fresh produce. We don't all realize that idling our cars wastes more energy than turning them off and on, or that granola is high in fat. And some of our choices are simply bewildering, which is why it's so easy to stumble into hidden fees and balloon payments tucked in the fine print of our mortgages. Even Ph.D.s can get confused by our society's paperwork; Thaler and Sunstein tell a story in *Nudge* about struggling to help a health economist pick a prescription-drug plan for her parents.

*Nudge* calls for aggressive rules for disclosure and clarity, to help us make more informed decisions about home loans, student loans, credit cards, health-care plans and retirement plans. Thaler points to an Executive Order, signed by Obama on his second day in office, that calls for new transparency through new technologies. "That's exactly what this is about," Thaler says. "If instead of the 30 pages of unintelligible crap that comes with a mortgage, you can upload it with one click to a website that will explain it and help you shop for alternatives, you make it as easy as shopping for a hotel."

[See pictures of Michelle Obama's fashion looks.](http://www.time.com/time/printout/0,8816,1889153,00.html)
See pictures of the Obamas in Europe.

More information can make us healthier too, which is why the stimulus poured $1.1 billion into "comparative effectiveness" research. Orszag has reams of charts showing that medical tactics and costs vary wildly across the country, with little regard for what works. He'd like to document best practices — from emergency-room to-do lists that dramatically reduce infections to protocols for when pricey tests and surgeries really help — and then have all medical providers adopt them. This approach has helped American anesthesiologists reduce deaths as well as costs.

But information alone isn't enough. We all know we shouldn't smoke or pig out on fudge, but knowledge isn't as powerful as motivation; even Summers could stand to lose a few pounds. Old behavioralist joke: How many psychologists does it take to change a lightbulb? Answer: Just one, but the bulb really has to want to change. (See the top 10 scientific discoveries of 2008.)

It's Got to Be Easy

Econ 101 relies on prices to promote change, and it's true that $4 gas got us to drive less. But prices aren't everything.

Even when utilities will pay for efficiency upgrades that will save us money for years, we're unlikely to make retrofits — unless the utilities take care of the schlep factors, like finding contractors and inspecting the work. Cheap is alluring; easy can be irresistible.

This is why default options pack such power. Most of us will save for retirement, run our computers in energy-efficient mode and be organ donors if we have to take action to say no — but not if we have to take action to say yes. Almost nobody signed up for a German utility's clean-energy plan until it became the default, and then 94% stuck with it. We're also much likelier to go to the doctor for preventive care like flu shots if the appointment is made for us. In a speech last year, Orszag even suggested charging us for doctor's appointments unless we take action to cancel, though he conceded that might sound "a little crazy at first blush or even second blush."

More along these lines is heading our way. The Administration hopes to harness our inertia with its automatic pension plan, a major step toward universal savings accounts, and by dramatically simplifying applications for federal tuition aid. Its push to computerize health-care records — another big-ticket stimulus item — could make generic drugs and cost-effective procedures our default treatments. And seniors who don't select health-care or drug plans could be automatically enrolled in low-cost options. "It would be nice if we all behaved like supercomputers, but that's not how we are," Orszag says.

http://www.time.com/time/printout/0,8816,1889153,00.html
While Obama's economists search for pain-free, hassle-free solutions to our easy-way-out instincts, his rhetoric often aims to build our tolerance for pain and hassle. He urges us to snap out of denial, to accept that we're in for some prolonged discomfort but not to wallow in it, to focus on our values. That happens to sound a lot like "acceptance and commitment therapy," the latest advance in behavioral psychology. Instead of assisting smokers to ignore cravings and chronic-pain sufferers to think about other things — the old denial approach — acceptance therapy pushes patients to acknowledge negative thoughts and then overcome them by focusing on values. Even a small amount of this approach seems to help smokers quit, dieters lose weight and patients with diabetes or chronic pain stay out of the hospital. University of Nevada, Reno, psychologist Steven Hayes believes our Prozac culture has trained us to avoid all discomfort, leaving us reluctant to exercise or adjust our thermostats. "We're supposed to be happy-happy-joy-joy all the time," Hayes says. "Obama is trying to help us get past that."

But Obama is no therapist changing individuals one at a time. He's an organizer trying to build community and inspire collective action through house parties and Facebook as well as rhetoric about shared values. In other words, he's trying to create social norms — behavioral change's killer app.

See TIME's "Six Degrees of Barack Obama."

See pictures of Obama's nation of hope.

Everybody's Doing It!

Which message would persuade homeowners to save electricity: a call to their environmental conscience, or an appeal to their wallet? Cialdini tested those approaches in a San Diego experiment, and the answer was neither. What worked was an appeal to conformity. Residents used less power when they were told their neighbors were using less power. We're a herdlike species, more likely to be obese if our peers are.

In a 2005 study, Alan Gerber of Yale got Michigan voters to increase their turnout an amazing 8.6% with a single peer-pressure mailer that listed the previous voting records of their neighbors and noted that a follow-up would be sent indicating who voted this time. (The Obama campaign actually priced out a similar mailer but decided not to risk a backlash.) And shame works; even some AIG executives gave up bonuses. Cialdini says brain imaging shows that when we think we're out of step with our peers, the part of our brain that registers pain shifts into overdrive. "It's an incredibly powerful spur to action," he says. (See 25 people to blame for the financial crisis.)
Social norms help explain the attraction of opt-out 401(k)s as well: it's not just that we're too lazy to check a box but also that we assume the default is the accepted thing to do. Obama's push to weatherize millions of homes — another stimulus bonanza — will require new norms. In Oregon, a countywide program to upgrade windows and insulation at almost no cost to homeowners got a tepid response. But after an intense mobilization campaign — through citizen councils, churches and Girl Scouts who went door-to-door asking residents why they hadn't weatherized yet — 85% of the county enrolled. "What worked was creating a sense that we're all in this together and you're a social deviant if you don't join us," recalls Ralph Cavanagh of the Natural Resources Defense Council. This is why community report cards help promote preventive health care and why interdorm conservation competitions help colleges save energy. And this is why Administration officials — after their crash course in run-on-the-bank mentalities cited in *Animal Spirits* — are trying to boost consumer confidence into a social norm.

**Sometimes We Need a Shove**

But we're not likely to spend if we don't have money. And we can't take public transit if there's none in our neighborhood. The bully pulpit has limits — Michelle Obama has literally urged us to eat our broccoli, but she can't make it taste like fudge. "I like nudges, but sometimes we need to do more," says Harvard's Mullainathan. Sometimes we need a shove. The research proves change can come about when it's easy and popular, but making it lucrative — or even mandatory — can make sure it happens.

This is one reason there's new interest in taxing gas, alcohol, electricity and even trans fats to discourage undesirable behaviors while closing budget gaps. Obama has already hiked taxes on cigarettes and wants to end tax breaks for drilling and offshoring. He seems even more eager to subsidize desirable behaviors like saving, teaching, weatherizing and buying fuel-efficient cars and energy-efficient appliances. Of course, his energy policy goes beyond incentives; he wants a strict national cap on carbon emissions. He has also signaled openness to a national health-insurance mandate. (*Read "The Year in Medicine 2008: From A to Z."*)

If neoclassical economics wants government to let us alone to do what we want, behavioral economics leaves room for government action to help us do what we would really want if we were rational agents. Unfortunately, the qualities that have crippled Washington in recent years — inertia, denial, allergy to complexity, preference for short-term gratification over long-term planning — are our own flaws writ large. Members of Congress are people too; they're likely to embrace change only when it's easy, popular and rewarding. Do we really want them trying to change us?

Michelle Obama warned us during the campaign, "[Barack] is going to demand that you shed your
cynicism, that you put down your divisions, that you come out of your isolation, that you move out of your comfort zones, that you push yourselves to be better." The President reinforced this in his Inaugural Address when he urged Americans to set aside childish things and choose hope over fear. (See pictures of how Obama prepared his Inauguration speech.)

But we don't need to change our hearts like that. Opt-out 401(k)s, simpler mortgage applications, programmable thermostats and cost-effective medical protocols can help us do the right things even if we remain ignorant, lazy, greedy and obsessed with childish things. It doesn't matter if we save energy because we care about the earth or our money or our neighbors; we just need to save energy. The government just needs to provide the right rules, incentives and nudges to help us make the right choices. It would be nice if Obama could change our social norms so that green living and healthy eating and financial responsibility would be new ways of keeping up with the Joneses. But it would be enough if he changed Washington's social norms. We need better policies, not better attitudes.

Behavioral literature can be a depressing window on human folly. But it offers us ways to transcend our folly, to restrain our ids, to harness our conformity and inertia and weakness in order to do less of the things that hurt us and our country. "In the physical world, we understand our limitations," Ariely says. "Nobody gets upset because we can't fly. We just design something to help us fly." If Obama can help us fly from our bad habits, he'll provide the change we need.

*The original version of this story misidentified Mike Moffo as a field director of Obama's campaign.*

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See George W. Bush's biggest economic mistakes.

Find this article at:
http://www.time.com/time/magazine/article/0,9171,1889153,00.html
The nature of change is similar to how a virus spreads in a population. This view of change was popularized by Malcom Gladwell's book "The Tipping Point." Below is a Time magazine article that discusses President Obama's use of change strategies. It is very interesting in light of how I view change and the latest research on change. The nature of change is similar to how a virus spreads in a population. This view of change was popularized by Malcom Gladwell's book called "The Tipping Point." Which details the importance of social networks in the creation of fads and social movements. Very interesting article. Read article. Share this article.

Barack Obama was describing to me the manner in which the Mongol emperor and war-crimes innovator Genghis Khan would besiege a town. "They gave you two choices," he said. "If you open the gates, we'll just kill you quickly and take your women and enslave your children, but we won't slaughter them."

But he now recognizes that the change he represented triggered an almost instantaneous backlash, one that culminated in the conspiracy that catapulted its prime propagandist, Donald Trump, to the White House. "What I think is indisputable is that I signified a shift in power. We talked about much more: the Iowa caucus; Ta-Nehisi Coates; climate change; the art and science of presidential memoir-writing; Michelle's views on race and optimism. It's all below. Scientific American is the essential guide to the most awe-inspiring advances in science and technology, explaining how they change our understanding of the world and shape our lives. What's the future of stem cells and other issues that frustrated scientists during the Bush administration? January 21, 2009. The Sciences. How Obama Can Boost the Economy by Investing in Science. The right investments could help restore the nation's economic strength and environmental sustainability. February 1, 2009. THE EDITORS.