Cognition Enhancing Drugs: Just Say Yes?

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One can imagine the academic moralist thinking up moral innovations and the charismatic leader picking them up and imparting them to the masses.
- Judge Richard Posner, 1999

The design of the moral sense leaves people in all cultures vulnerable to confusing defensible moral judgments with irrelevant passions and prejudices.
- Steven Pinker, 2002

INTRODUCTION

In the 1980s, an earnest spokesman for the Partnership for a Drug Free America presented our nation’s children and teens with a sizzling egg in a frying pan and, with the voice of a stern-but-caring father, warned, “This is your brain on drugs…Any questions?”¹ Questions, however, would go unanswered.

This fifteen second television spot was not intended to invite curiosity or debate, though viewers were never actually told “which” drugs it referred to. Rather, the ad was supposed to teach an unambiguous lesson: “drugs” are bad. Hardly an appeal to human reason, one could even recognize in it a tinge of fear mongering and misinformation.

Of course, in the wake of the crack epidemic, it is perhaps understandable that we Americans instructed our youths to “just say no” to all drugs, period, or else! It seemed self-evident that an advertisement presenting detailed facts about the neurobiology of addiction as it varies from substance to substance would have made little impact at all on children and teens,² and, ultimately, it is a banal observation that many well-regarded anti-drug campaigns have sought to dissuade potential users by depicting use as “deforming” and portraying users as disgusting failures or social misfits.³ But how do we decide when it is and when it is not okay to obscure facts and play on emotions for the sake of paternalistic “good sense?” Could we imagine using deceptive advertising today in the twenty-first century—on adults—to endorse changes to drug policy, or drug use in general, when the benefits outweigh the risks? For instance, should further research account for all potential pros and cons, could this be an acceptable approach to engendering majoritarian support for the unrestricted dissemination of cognition enhancing drugs?
Perhaps this is a dubious proposition, but how else can scholars sell their empirical evidence to a voting population distracted by and large by the longstanding stigma attached to mind-altering substances?

For now, neither the government nor nonprofit advocacy groups seem inclined to embark on a “just say yes” campaign that would grossly exaggerate benefits of certain drugs and play down risks for the sake of paternalistic persuasion, but top scientists and scholars are quick to acknowledge that it is troublingly difficult to sell important counterintuitive concepts to an obtuse voting public when speaking solely in terms of cold hard facts.

Aristotle explained some time ago that rhetoric must “stir the emotions of the hearer,” as “it is not enough to know what to say; we must also say it the right way.” And contemporary advertising bears out this maxim quite nicely. Group demonization, fear-mongering, exaggeration, and over-moralization have long been successful tools of persuasion. But such tactics have also been criticized extensively.

Noam Chomsky sounded practically enraged by the average human’s inability to navigate past deceptive rhetoric when he wrote Media Control in 2002. The blurb on the back reads, “The issue is whether we want to live in a free society or whether we want to live under what amounts to a form of self-imposed totalitarianism, with the bewildered herd marginalized, directed elsewhere, terrified, screaming patriotic slogans, fearing for their lives, and admiring the leader who saved them from destruction.”

The subtext is that if everyone could just be rigorously rational, we would not have to worry about deceptive persuasion tactics.

But while such frustration among academics is understandable, the prevailing research on human cognition indicates that humans will behave “irrationally” no matter how much they’re lectured. Unfortunately, we humans are consistently subject to “cognitive and motivational distortions” that have a significant effect on our judgment and choices.

And this means that adults, when faced with certain important decisions, may need to be “nudged” in the right direction just as much as children.

Indeed, Cass Sunstein, Administrator of the White House Office of Information and Regulatory Affairs, has said candidly that “respect for [individual] choices rooted in incorrect judgments” might not be such a great way to “promote utility or welfare.” In other words, maybe we need to face the music and reconsider the prevailing wisdom of John Stuart Mill that says, hands down, I am the best person to decide what is best for me. Maybe the critics of deception need to change their tune and embrace the tricks of persuasion as near-necessity.

Of course, when arguing from the premise that “all individuals” are fallible decision-makers, it is tricky to suppose collective welfare could be increased if “some individuals” help “other individuals” decide what choices to make—(after all, how can I know what is best for you if I do not even know what is best for me?)—and, unfortunately, the superiority of any one choice over another cannot really be grounded in objectivity.
However, often there are compelling reasons for why some choices and ideas may be better than others, and there are definitely instances where it might make sense to defer our decisions to those with better resources for making informed judgments.

Sunstein has not gone so far as to advocate the type of hardcore paternalism that would actually limit options or directly coerce behavior—rather, he has merely proposed a pragmatic method for encouraging humans to start making better choices from among the same existing options. He calls this method “libertarian paternalism,” and for its substance he borrows some insight from the principles of marketing (which are, of course, also based on the fallibility of human cognition). Simply put, libertarian paternalism calls for strategic engineering of the way choices are framed or presented to people. For instance, Sunstein has suggested putting the fruit (and not the cookies) right next to the registers in the school lunch line. Whereas marketers use such strategies to push products, Sunstein suggests that the state could use this power for “good,” so to speak. When the “good,” to the irrational human, seems “bad,” the irrational human needs a “nudge.”

Although the scientists and pharmaceutical companies have not yet concocted for us a completely risk-free, low cost, widely available “super-pill,” we can already find in large supply a variety of prescription drugs that the media have likened to “brain steroids.” These drugs can improve memory and concentration, increase alertness, and suppress fatigue, meaning they can help us work longer, harder, and more efficiently at solving problems. Widespread use of such drugs in the workplace could mean increased productivity across all industries, from manufacturing to environmental science. Thus, should further research indicate that such drugs do not come with any problematic risks to individuals or society as a whole, widespread availability of cognition-enhancing drugs is perhaps one such “good” worth promoting even if it may seem “bad” to irrational humans at present. This is the counter-concept of the “bad” drugs that supposedly seemed “good” to irrational children and teens in the 1980s.

My goal is not, however, to persuade that cognition-enhancement is “good” or “bad” or “moral” or “immoral.” Nor is my goal to advocate policy change. Instead, thinking pragmatically about the ways other unconventional utilitarian initiatives have gained traction, my aim is to persuade academics and policy advocates that if their efforts to prompt change in regard to this issue are ever to succeed, they must first take account of the human cognitive flaws and motivational biases that may well lead a majority of the public to reject such a prospect. I argue that, regardless how miniscule the risks or how blatantly obvious the benefits, a majority of U.S. citizens is unlikely to support the unrestricted dissemination of cognition enhancing drugs, because each individual member of the majority will be led astray by cognitive biases and illusions, as well as logical fallacies.

If this premise is accurate, then the people of the United States may already be suffering an opportunity cost that cannot be recouped. While a minority of the U.S. electorate can challenge the constitutionality of a policy enacted by a majority, a minority cannot sue to challenge the legislature’s refusal to enact a specific policy. In
other words, we in the minority have no way of claiming we were harmed by what “good” could have come—but did not come—due to the legislature’s inaction. We cannot claim the “opportunity cost to the greater good” as an injury, and we cannot compel a court to balance that opportunity cost of inaction against the individual interests that dissuaded the majority from action.23 Our only recourse is to compel the majority to change its stance via persuasion.

In Part I of this article, I will set out a descriptive account of human morality and rationality in order to explain why advocacy for cognition enhancement is met with moral indignation. Then, in Part II, I will discuss how a better understanding of human cognitive deficits sheds new light on the best strategies for persuading irrationally indignant opponents of utilitarian initiatives. The method of persuasion I will present is a form of moral entrepreneurship modeled on Cass Sunstein’s “libertarian paternalism” and further informed by evolutionary theories of morality, as well as empirical research on legal legitimacy, compliance, and the logic of social reciprocity.

I. THE RATIONALITY OF MORAL ARGUMENTS OVER COGNITIVE ENHANCEMENT

Perfect “unbounded” rationality would seem to require omniscience on the part of humans.24 In pursuit of any and every goal—including those of: forming beliefs, forming plans or strategies for how to form beliefs, and, well, forming plans or strategies for how best to form plans and strategies—we would need unlimited access to information.25 And, in order to draw perfectly valid and sound logical conclusions from that information, we would need unlimited computational power.26 But, in order to be sure our actions would be maximally optimal at all times, we would also need to know exactly how much information to gather and how much computation to perform before the benefit of additional information gathering and computation would begin to outweigh the costs of gathering and computing.27 Indeed, we would require omniscience.

Humans do not possess unbounded rationality,28 and the most persuasive theoretical explanation of human behavior and decision-making seems to come from cognitive science and evolutionary psychology, not classical economics.29 These disciplines also provide a compelling explanation of the origins of human morality and thus offer much insight as to how humans might approach the question whether otherwise healthy individuals should ever be allowed access to cognition-enhancing drugs.

As one theory puts it, the human moral sense is largely dictated by hardwired, universal “emotions”—contempt, anger, disgust, gratitude, awe, sympathy, guilt, shame, embarrassment, etc.—that we experience unavoidably in response to certain circumstances and stimuli.30 These emotional responses encourage us to: help those who are in need, reward those who help us, punish those who try to take advantage of us or cheat us, and resist the urge to become cheaters ourselves.31 They also prompt us to formulate, internalize, and perpetuate over generations certain norms and principles that serve as rules for social conduct.32 Some of these rules vary and are unique to the group that developed and perpetuated them, possibly as a result of different environmental exigencies that group faces or once faced. For instance, even
though “disrespect” may universally incite “anger,” the types of actions that constitute “disrespect” may vary by “culture.” Some rules about social conduct are mere tautologies (e.g., “unjustified killing is wrong”) that depend on other rules for their content. Some of these rules, when infused with enough content, become “laws.” All in all, the process of “living” is really just a matter of creating and following certain guidelines for dealing with whatever opportunities and constraints we encounter in the process of unwittingly carrying out our genetically-preprogrammed imperatives of survival and reproduction.

Of course, humans do not go around couching the concept of “human life” in such coldly scientific terms. Yes, perhaps our genes are “selfish” in that they program us to behave in ways that were conducive, in the environments we evolved in, to their ultimate goal of replication; but we humans did not and do not set this ultimate goal ourselves, and when utilizing our hardwired strategies, we do not consciously draw connections between gene replication and our behaviors and motivations. Rather, we understand our behaviors and motivations solely in terms of our individual “pleasure versus pain continuums” (so to speak), which are imaginary linear scales we use to rate the desirability and undesirability of the sensations we experience in various circumstances. Our genes purposefully dictate what circumstances and stimuli we will experience as positive and negative—but all we humans do from there is try to experience the positive as much as possible and avoid the negative (except where the negative is a presumptively necessary means to the positive). This intuitive concept of “positive and negative” experiences forms the original basis for the ethic of reciprocity (“the Golden Rule”), as well as the original principle of hedonistic utilitarianism, a derivative of which supplies the rationale for permissive cognitive enhancement.

A. Utilitarianism vs. Deontology: The Switch vs. The Fat Man

One of the most prominent proponents of moving “toward responsible use of cognition-enhancing drugs by the healthy” is Stanford law and bioethics professor Hank Greely. In 2008, Greely and five colleagues published an article in Nature calling on “physicians, regulators and others” to expand research, public discourse, and policy debate on the pros and cons of enhancement, all in the interest of spurring eventual legislation. Noting that productivity, quality of life, and innovation, for instance, are non-zero-sum games, Greely and colleagues argue that, if cognition enhancement could ultimately lead to benefits for all of society, a permissive policy on use and availability would be morally advisable from a utilitarian standpoint. Utilitarianism is of course Jeremy Bentham’s famous consequentialist moral philosophy, which dictates (in its most common “universal” formulation) that the “moral” outcome is that which leads to the “greatest good for the greatest number.” Of course, there is debate over whose preferences should be included in the “greatest number” calculus—animals? aliens? unborn humans?—but for our purposes, let us limit our conception of the “collective” to current U.S. citizens.
Now, it seems plausible enough that, if cognition-enhancing drugs could be deemed safe, most U.S. citizens would be quite eager for our nation’s top scientists and engineers to have a little extra help on the path to solving the most difficult problems facing humanity. We all want a cure for cancer, a cure for AIDS, an end to poverty and hunger, an energy alternative to oil, a way to save the planet from global warming, a spacecraft that can travel beyond Pluto, and many other agreeably desirable innovations such as faster internet access for our phones, better video game graphics, and cheaper and easier methods of travelling long distances.

Of course, the notion that such innovations could arrive sooner than later as a result of the widespread permissive use of cognition enhancing drugs is highly speculative; however, it is well-documented that existing enhancement drugs improve one’s ability to work through complex tasks and problems by suppressing fatigue and enhancing alertness, focus, concentration, and memory. Thus, these drugs arguably do provide a means for humans to achieve important goals at a faster pace than would otherwise be possible.

Meanwhile, proponents say there may be plenty more potential benefits beyond the mere prospects of increased productivity and innovation. For instance, “It has been suggested that many people would prefer to fly with airlines or go to hospitals where the personnel take alertness-enhancing drugs.” And enhancement en masse could potentially improve the quality of public discourse as well as citizens’ abilities to analyze political rhetoric critically, leading to greater governmental accountability.

Still, ask any citizen point blank whether she would be eager for society to reap the potential benefits of cognition enhancement, and she will likely ask, “What’s the catch?”

A “catch” is just like a tradeoff—for example, if you have $5, you can buy a $5 hamburger or a $5 chicken sandwich, but you have to choose one or the other—you cannot have both. Or, for a more relevant example, if you were asked whether you would like to live in the safest country in the world, you would probably say, “Well, ideally, yes.” But if living in the safest country in the world meant you would have to be subject to twenty-four-hour surveillance, you might decide that the “catch” is not worth the safety.

Ultimately, even if everyone agrees that both hamburgers and chicken sandwiches are “good”—or that both safety and freedom are “good”—individuals are bound to disagree as to which “good” thing is “better” in any given context. And the extent of disagreement can vary depending on hundreds of factors. This is perhaps why Amartya Sen has said that there can be no context-blind absolutes or ideal principles. Justice, Sen argues, can only be discerned via “comparative assessments between pairs of alternatives” in light of the particular contexts in which they are being traded off.

Thus far, the use of cognition-enhancing drugs has been anything but widely supported or encouraged by the lay public. A review of the popular press suggests a conflicted citizenry for whom tentative enthusiasm is drowned out by myriad misgivings. So,
what are the factors that stand to sway the people against a permissive cognition enhancement policy?

It goes without saying that safety is a chief concern; however, in this article I am operating under the assumption that there is no debate even to be had until any and all safety concerns can be assuaged with further research. But, even assuming safety would not be a legitimate issue, some people will rest on non sequiturs and assert, for instance, that humans should not be “playing God.” Some will worry that we will become too dependent on such drugs and will be unable to function without them. And some, like renowned philosopher and political economist Francis Fukuyama, will argue extensively and eloquently that such drugs might detrimentally alter the human sense of self and individualized identity and thus undermine the social fabric of human existence by degrading the authenticity of social interaction. Fukuyama has said, “The original purpose of medicine is to heal the sick, not turn healthy people into gods” — furthermore, enhancement drugs might “erode the relationship between struggle and the building of character.”

Now, misgivings like those presented by Fukuyama are mostly conclusions derived from a sort of balancing act—a cost-benefit analysis pitting the prospective (albeit speculative) benefits of cognition enhancement against prospective (sometimes also speculative) risks and costs, both to individuals and society at large. Other types of opposition concerns, however, seem to reflect categorical notions of moral certainty.

Many moral philosophers reject contextual utilitarian balancing in favor of deontological moral rules that focus on the justness of decisions and actions without regard to consequences, in light of categorical rights and duties that should apply regardless of context. Immanuel Kant is the kingpin of deontology who brought us the “categorical imperative”— “act only according to that maxim whereby you can at the same time will that it should become a universal law.” Kant also urged that a human should never be used as a mere means to some other end, as each human is an end in and of him or herself. Basically, Kant thought it was categorically improper to infringe certain fundamental individual rights no matter the justification for doing so, and he believed reason alone could delineate for humans what those categorically inviolable rights would be. Furthermore, Kant believed humans have a duty to engage in deontological moral reasoning to determine what is “just” and to adhere to what is “just” regardless whether doing so will maximize some aggregate “good.”

As I have said, a legitimate policy debate about cognitive enhancement should not even proceed until objective risks and costs to individuals as well as society can be accounted for. Furthermore, until the risks and costs can be deemed no more significant than those associated with other popular enhancement methods such as caffeine consumption, I would not even expect that a permissive policy would be warranted. This is why I have chosen to focus this article narrowly on arguments sounding in deontological “moral” opposition to cognition enhancement. My claim is that, should all risks and costs be adequately accounted for, concerns based in reason could mostly be quashed, but strong opposition among the lay public is likely to remain with arguments
sounding in categorical moral certitude and indignation. These types of arguments—rooted in irrational fears, illogical contentions, and intuitive questions of fairness—are likely to remain salient for the lay public in the long run anyway, regardless what empirical research may say.

First, there is the “cheater concern.” The “cheater concern” is very easy to recognize whenever a college newspaper runs a headline that asks something like, “Is pill-popping before finals an honor code violation?” Below the fold, one is always bound to find a parsimonious call for “drug testing” at the next exam.

Let us assume for a moment that, with all risks and costs eliminated or debunked, all concerns assuaged, a change in federal policy actually occurs. There would then still be some inevitable stretch of time during which a certain number of persons would be unable to acquire these drugs due to cost or insufficient supply, and there would also be a certain number of persons who would not yet even be aware of the existence or availability of the drugs. Basically, we must assume some indefinite, inevitable span of inequality of access. From there, we can also assume that, for some span of time beginning the moment the new permissive regulatory scheme would take effect (though perhaps not for too long thereafter), those who are barred from access would constitute a majority of the U.S. voting public.

If this were true, we might readily expect that, prior to the hypothetical regulatory change even occurring, when the issue was still being debated, there would have been a majority of citizens faced with the prospect that, if they were to endorse such a regulatory change, the integrity of the institutions through which they compete for their livelihoods—schools, businesses, the arts and sciences, etc.—would be compromised. Enhanced individuals would have an upper hand in competition against the not-yet-enhanced, and this would leave the latter feeling as though the resulting disparity in ability to acquire resources would be unjust. Were this outcome foreseeable prior to the policy change, it would likely have caused them to have rejected the idea from the start.

Indeed, whether I want the drugs but cannot get them or can get them but do not want them (perhaps due to “irrational fears”), I am bound to exude moral indignation; I had expected to compete in a race—a race for income, grades, promotions (valuable zero-sum resources and status indicators)—but I had a “legitimate expectation” that my competitors would not be running the race on steroids! In the short-term, I do not really care about the potential fruits of the labors of enhanced individuals regardless whether I might reap the magnificent benefits of those fruits someday without even having contributed to them myself. And even if I could have access to cognition enhancers, maybe I don’t want to have to feel forced to take “drugs” just to keep up—drugs are unnatural! I’m irrationally afraid of all drugs! Yes—it is imperative that I make clear to everyone that I will not stand by and suffer in the short-term! I will not allow myself to be a mere pawn for the greater good!
Does this sound like the makings of a legitimate moral claim? John Rawls might advise the hypothetical “me” to step behind the “veil of ignorance” and think things over a little longer. In an attempt to improve upon Kant’s deontological framework, Rawls suggested that each of us should imagine a sort of pre-life purgatory—a hypothetical place you must hypothetically visit in order to try to imagine that you are not yet born and that you have no idea where you will end up once you are born. (You could end up an orphan in a third-world country or an heiress to a global hotel chain.) Then, you must decide what principles and institutions would be “fair” in light of the possibility that you might indeed turn out to be a member of a brutally oppressed minority that the majority would like to exploit.

So far, the morally indignant “me” who does not want to be “exploited” still sounds justified under this deontological framework. But Rawls assumed that, behind this “veil of ignorance,” we would accept unequal distributions of resources under one condition—the inequality would have to somehow work to the benefit of those who end up worst-off. Inequality in achievement and perhaps income for the sake of innovation sounds to me like it passes this test (i.e., it satisfies the Rawlsian “difference principle”).

However, it is not worth splitting hairs at the moment over whether Rawls would agree that permissive cognition enhancement has a sufficient probability of benefitting the worst-off. The more important point to glean comes from critics of Rawls who note that since the difference principle treats the fruits of abilities (and, thus, the abilities themselves) as common assets, Rawls was indeed making Kantianism more practical—by inadvertently admitting utilitarianism cannot be flatly ignored!

The real reason deontologists cannot properly rid the world of utilitarianism is that principles of categorical and consequential morality both come naturally to humans at different instances and under different circumstances. Harvard psychology professor Joshua Greene has set out a “dual-process theory of moral judgment” that suggests deontological judgments are driven by our automatic emotional responses while utilitarian judgments are driven by more “controlled cognitive processes” in other parts of the brain. “Nearly everyone is a utilitarian to some extent.”

Greene has used functional magnetic resonance imaging (“fMRI”) to examine what is really going on in the brains of humans when presented with the famous “trolley problem” of moral philosophy. The “trolley problem” goes like this: a runaway trolley is about to kill five people standing on a set of tracks unless you flip a switch to shift the trolley onto another set of tracks where only one person is standing—do you do it? A majority say yes. Then there is a second scenario: the trolley is about to kill five people standing on the tracks unless you shove a fat man (who happens to be standing next to you) onto the tracks—do you do it? A majority say no.

According to Greene, the emotional responses exhibited at the prospect of actually shoving the fat man are drastically stronger than those exhibited at the prospect of the detached and impersonal flipping of a switch. Cognitive science provides a coherent explanation for the difference in responses and the contradictory reasoning of the first
and second majorities in regard to the trolley problem. The same principles that underlie this explanation also predict that moral indignation arising from “irrational fears” and/or the “cheater concern” would prevent a majority of citizens from endorsing the utilitarian justifications for permissive cognition enhancement. The following section will illuminate these underlying principles.

B. “What is Wrong with You People?”

When humans associate in groups with well-aligned interests and well-settled and well-defined norms, as we have for most of our evolutionary history, it is common for group members, when confronted with outsiders who adhere to different norms and possess different interests, to wonder, “What on earth is wrong with them!?”

Indeed, the value-free objectively descriptive term “different” is often immediately translated to the subjective value judgment: “wrong” in the human mind, so that out-group characteristics can be subordinated to in-group rules and preferences, which take on a quality of moral truth.

What follows below is a descriptive account of the human biases, cognitive illusions, and logical fallacies that cause humans to imbue such fallacious translations with moral certitude.

1. The “Irrational” Tendencies

Renowned criminal law scholar Stephen J. Morse has said, “Understanding the lawful regularities of human behavior might reveal what is possible for human beings and what is not, but such understanding cannot dictate what morals, politics, and laws we ought to adopt.” This is an important concept to bear in mind whenever questions of social policy are colored by questions of morality, so I will begin this section with a discussion of the “naturalistic fallacy” and the “is/ought” problem—two reminders from meta-ethics that there is a significant difference between “description” and “prescription.”

The “is/ought” problem is David Hume’s famous kernel of wisdom that tells us: just because something “is” the way it “is” does not mean that it “ought to be” that way, and the “naturalistic fallacy” is G.E. Moore’s very similar reminder that just because something is “natural” does not mean it is inherently “good” or “right.” Arguments that conflate the “natural” with the “morally good” might be illustrations of the type of (unsound) post hoc rationalization that humans produce after coming to a moral judgment automatically via emotional response—in other words, some “irrational” arguments may just be proxies for the automatically induced moral indignation that arises from the perception that one is being taken advantage of. But some researchers believe we might be able to group the moral emotions into “spheres” that relate specifically to the interests they were hardwired to serve—we have emotions that (1) condemn others (contempt, anger, disgust); (2) make us self-conscious (shame, embarrassment, guilt); (3) make us feel for others (compassion, empathy, sympathy); and (4) make us praise others (awe, gratitude, elevation). In other words, we might think
of our moral judgments in terms of whether they pertain to our broader interests regarding, “self,” “community,” or the “natural world.” The sphere of “self” governs moral judgments about one’s own rights and interests (here is where we would find the “cheater concern”). “Community” pertains to “social mores like duty, respect, adherence to convention, and deference to a hierarchy.” And the “nature” sphere (also known as the “divinity” sphere) pits “purity” against “contamination.” So, it is possible that violations of the naturalistic fallacy result from an evolutionary imperative to err on the side of caution when encountering the “potentially contaminated” or “impure.”

In any event, “the moral sense leaves people in all cultures vulnerable to confusing defensible moral judgments with irrelevant passions and prejudices.” Indeed, in addition to a bias for the “natural,” many arguments are rooted in bias for the “status quo” and evince myopia when subjected to the lens of rationality. Empirical research demonstrates that we humans are generally terrible at reasoning about probability and are actually unable in many instances to predict what will make us happy or unhappy in the future. It turns out that we are so incredibly averse to loss (and hilariously inclined to disobey classical economic assumptions) that, in a laboratory experiment, given the choice between receiving a $6 coffee mug or some cash (in an amount we agree would make us indifferent between receiving the cash or the mug), we are satisfied, on average, with $3.50—but then, if we are instead told to imagine that we already own the $6 mug and are asked to determine the minimum amount of cash we would sell it for, we demand, on average, $7.12.

Losses inevitably “loom larger than corresponding gains,” even when we are to lose something that we never paid for and only owned hypothetically for a few seconds. And the future looms—well—how large or small do you think? Sometimes we are willing to discount the future as if we will die any moment—carpe diem! This is why we buy energy inefficient appliances and forego the grueling nightmare of a few minutes of 401k enrollment paperwork.

“The simple point here,” says Oxford philosophy professor Nick Bostrom, “is that our judgments about such matters are not based exclusively on hard evidence or rigorous statistical inference” but on mental shortcuts and intuitive predispositions. Bostrom, who fights from the same corner as Hank Greely on the issue of enhancement, has suggested that status quo bias plays a tremendous role in people’s judgments on the issue. He notes:

Changes from the status quo will typically involve both gains and losses, with the change having good overall consequences if the gains outweigh these losses. A tendency to overemphasize the avoidance of losses will thus favor retaining the status quo. . . . Even though choosing the status quo may entail forfeiting certain positive consequences, when these are represented as forfeited “gains” they are psychologically given less weight than the “losses” that would be incurred if the status quo were changed.

And what about inconsistencies in the preferences of those who would oppose permissive enhancement? Bostrom asks:
How is taking Modafinil fundamentally different from imbibing a good cup of tea? How is either morally different from getting a full night’s sleep? Are not shoes a kind of foot enhancement, clothes an enhancement of our skin? A notepad, similarly, can be viewed as a memory enhancement—it being far from obvious how the fact that a phone number is stored in our pocket instead of our brain is supposed to matter once we abstract from contingent factors such as cost and convenience. In one sense, all technology can be viewed as an enhancement of our native human capacities, enabling us to achieve certain effects that would otherwise require more effort or be altogether beyond our power.99

Bostrom goes on to question the grounds upon which opponents draw distinctions between pills and all those other types of enhancements that they are already so well-accustomed to. Sure, distinctions can be drawn, but are they “morally relevant” distinctions?100 According to Bostrom, the burden is on the opponents of enhancement to provide a rational justification if they truly believe such moral distinctions—or such a justification—exists.101 Meanwhile, Jeffrey J. Rachlinski points out that if you thought these biases and illusory distinctions were bad enough, add in the fact that people are overly optimistic and have self-serving conceptions of how well they do everything, and it is even less surprising that “individuals seem to accept willingly risks associated with activities that they voluntarily undertake” but then “overreact to risks that are involuntarily imposed on them.”102

2. The Origins of Human Motives

So, what is the root, underlying cause of these illusions, biases, and motivational distortions? Well, “humans evolved in natural environments, both social and physical,” and are born pre-programmed with the goals of survival and reproduction.103 To achieve those goals, we have been forever faced with the choice of either adapting to our environments, or, changing them. The decision-making fallibility we display today lives on because, in the environments we evolved in, we mostly needed “ecologically rational”104 rules of thumb to guide our decisions—we needed to solve problems quickly and with little information, thus, we needed “good” solutions, but we did not necessarily need the “best” or most “optimal” solutions.105 In fact, optimal solutions were likely impossible or counterproductive given the exigencies and constraints of our evolutionary environments.

Today, we engage in much collective decision-making and often have the time and resources to deliberate extensively in pursuit of optimal decisions, using the content-blind norms of logic. The “fast and frugal” “heuristics”—or, “rules of thumb”—of our evolutionary past hastened our decision-making processes effectively, but today’s industrialized world is drastically different from the environment we evolved in, and many of our heuristics have become counterproductive to our new environment-specific goals. For instance, the “shortcuts” that in the past thankfully guided us to quick decisions to “do what the group is doing” when the group was running from potential attack now merely steer us toward the boxers Michael Jordan endorses and the norms adhered to by the kids at the cool lunch table.
The next question is then: how did we get so smart? “Technology” is defined as “practical application of knowledge,” giving rise to new capabilities. And it is the rigorously rational scientific method—not mental shortcuts—that allow us to test the “truth” of propositions and, thus, acquire knowledge. Indeed, the scientific method is sure to be the root cause of every “improvement” to what we conceptualize as human “standard of living”—and “intelligence” is best defined as “the ability to attain goals in the face of obstacles by means of decisions based on rational (truth-obeying) rules.” So how did we go from heuristics to the level of rigorous rationality that allowed us to fly to the moon?

One theory is that intelligence is the product of a “cognitive arms race.” To understand this concept, it is helpful to remember that human life is inadvertently guided by genetic programming. But, while we are guided to achieve many goals that appear to be ends in and of themselves, these goals are really just means to our ultimate human ends of survival and gene replication. There are three motives that are essentially direct sub-goals to our genetic ends, each demonstrably universal among the species: the acquisition of resources, the acquisition of status, and preference for kin. And each of these sub-goals entails sub-sub-goals. The recognition of “naturally” motivated sub-goals and sub-sub-goals provides testable predictions about human cognition and behavior (especially morality and decision-making) and contributes to the emerging theoretical understanding of human existence through the lens of evolutionary science.

The first step is to reverse-engineer our motives in light of our ultimate genetic goals. Our most basic goal is the acquisition of resources, as we need resources to survive, and our genes program us to want everyone who shares our genes to have the resources necessary to survive as well. But resources are rivalrous, so we must compete with the rest of the species to acquire them. Competition is not the rule, however, and very often, we can all gain much more by cooperating than by pursuing our interests individually. But cooperation is a “tit for tat” enterprise, and no one wants to incur all the cost and receive none of the benefit, so someone who believes her willingness to cooperate is being taken advantage of will want to punish the “cheater” and send a signal to alert everyone (including other would-be cheaters) that she will not tolerate such injustice. Sometimes, though, she will be the one who wants to cheat, simply because she will be able to gain more by taking advantage of another person than by cooperating. Sometimes she will. But, most importantly, she—well, all of us—will want to establish reputational credibility—we will want others to believe: (1) that we are willing to cooperate fairly and are willing even to act altruistically toward non-relatives but will not tolerate being taken advantage of and will punish those who attempt to take advantage of us; and (2) that we are good at acquiring necessary resources and/or have already acquired a lot of resources and possess “good genes” (if “good genes” are defined in terms of, say, healthiness and ability to acquire resources).

From here, it is easy to conceptualize the natural selection of intelligence as a “cognitive arms race”: 
Selection favors cheating when the altruist will not find out or when she will not break off her altruism if she does find out. That leads to [people becoming] better cheater-detectors, which leads to more subtle cheating, which leads to detectors for more subtle cheating, which leads to tactics to get away with subtle cheating without being detected by the subtle-cheater-detectors, and so on.\textsuperscript{117}

Robert Trivers and many others have explained the emotions as “strategies in the game of reciprocity.”\textsuperscript{118} The emotions of “love” or “liking,” they say, make us willing to help those who seem willing to help us.\textsuperscript{119} “We like people who are nice to us, and we are nice to people whom we like.”\textsuperscript{120} “Anger” protects us when our niceness has been exploited. “Gratitude” makes us want to return favors.\textsuperscript{121} “Sympathy” makes us want to help those in need, or, if we would like to be cynical, it helps us “purchase gratitude.”\textsuperscript{122} “Guilt” warns us we might be caught cheating, and, once we are caught, “shame” encourages us to try to repair the damage “with a public display of contrition.”\textsuperscript{123}

In the game of “cheater vs. cheater-detector,” “the search for signs of trustworthiness makes us into mind readers, alert for any twitch or inconsistency that betrays a sham emotion.”\textsuperscript{124} The economist Robert Frank has pointed out, “The key to the survival of cooperators . . . is for them to devise some means of identifying one another, thereby to interact selectively and avoid exploitation.”\textsuperscript{125} This important endeavor is an intellectual one in that the detection of inconsistencies requires us to take a range of information (i.e., another human’s words, actions, or facial expressions) and subject it to deductive logical analysis. One tremendously interesting experiment has shown that humans use logic effortlessly in the context of cheater-detection but are thrown completely off track by identical logical reasoning tasks that lack a moral dimension. Leda Cosmides and John Tooby have illustrated this finding as follows:

Imagine that part of your new job for the City of Cambridge is to study the demographics of transportation. You just read a report on the habits of Cambridge residents that says: “If a person goes into Boston, then that person takes the subway.”

The cards below have information about Cambridge residents. Each card represents one person. One side of a card tells where a person went, and the other side of the card tells how that person got there. Indicate only those card(s) you definitely need to turn over to see if any of these people violate this rule.

| Boston | Arlington | subway | cab |

From a logical point of view, the rule has been violated whenever someone goes to Boston without taking the subway. Hence, the logically correct answer is to turn over the “Boston” card (to see if this person took the subway) and the “cab” card (to see if the person taking the cab went to Boston)...

In general, fewer than 25% of subjects spontaneously make this response. Moreover, even formal training in logical reasoning does little to boost performance on descriptive rules of this kind...

...\textsuperscript{126}
Now, try this one. Imagine that you are the bouncer in a nightclub (where patrons must be 18 to enter but 21 to drink). You arrived to work late so you did not check IDs at the door and no one handed out wristbands to those who are over 21, so now you must walk around and enforce the rule: “If a person is drinking alcohol, s/he must be 21 or older.” You may check either what a person is drinking or how old that person is. Of the following four people, you can see what two are drinking but do not know their ages, and you know the ages of the other two but are not sure if their drinks contain alcohol. Who do you have to check?

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<tr>
<td>Beer drinker</td>
<td>Soda drinker</td>
<td>25-year-old</td>
<td>16-year-old</td>
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Most people know right away that they must check the beer drinker and the sixteen-year-old.\(^{127}\)

As this experiment may indicate, rationality was selected for the benefits it confers upon us in our unknowing pursuit of our ultimate human ends.\(^{128}\) But a corollary to this theory is that, if there are instances when irrationality remains more beneficial to those same ends, then our sheer potential for rationality in some instances does not imply that we will be capable of it in all instances.\(^{129}\) Consider another experiment, known as the “ultimatum game.”\(^{130}\) One participant (player one) is given $10 and told that he must divide the $10 between himself and another participant (player two)—if player two accepts the amount player one offers him, they both get to keep the money. If player two rejects the offer, neither gets any money.

According to classical rational choice theory, a “rational player one” would offer a penny to player two and a “rational player two” would accept a penny because a penny is more than player two had at the start of the experiment.\(^{131}\) But the data show that the average player one offers around one-third of the money, and over 25% of people in the role of player one propose a fifty-fifty split, whereas only 11.8% try to keep more than 90%.\(^{132}\) In other words, player one wants to seem fair or cooperative, or he worries he will be punished for seeming unfair or uncooperative. At the same time, five out of six people in the player two role who were offered one dollar or less rejected the offer, and six who were offered more than one dollar rejected the offer!—presumably to punish what they perceived as uncooperative behavior and/or deter player one from trying to take advantage of them in the future.\(^{133}\)

If we humans indeed spent most of our evolutionary history living in small social groups and interacting with the same individuals day-in and day-out, it is understandable that we do not distinguish one-shot interactions from iterated games. The ultimatum game is a one-time-deal—the subjects go to the laboratory and participate in the experiment once and leave. If this were a game to be played over and over between the same two participants (i.e., if it were “iterated”), it would make sense, in the first round, for player two to “irrationally” refuse to accept a low offer (whereas classical economics predicts
acceptance of any value). If the game has to be played, say, 50 times, player two can keep rejecting offers (meaning neither will get any money) until player one’s offers go up enough to be to his liking. Meanwhile, player one might want to make an “irrationally” generous offer right from the start, or else player two might spread the word around the village that player one was not a very nice guy to deal with.

The psychology of moral indignation is complex, but there is much reason to believe that if permissive cognitive enhancement is not made to seem fair—or its benefits made to seem tangible—to those who perceive that it would do injustice to their individual interests, then those individuals will see such a policy as equivalent to being offered a penny from player one in the ultimatum game. Furthermore, they will potentially see the policy’s advocates as the arbitrary and undeserving beneficiaries of the other $9.99. Meanwhile, given the self-serving biases—(which, by the way, were arguably selected for because we are better at convincing others of our trustworthiness or sincerity if we have first convinced ourselves)—we can expect opponents of permissive enhancement to be resistant to rational arguments that attempt to persuade them of their own irrationality, as they will be overly-optimistic that their perspective is indeed the “just” perspective, if not the “rational” one as well.

II. MORAL ENTREPRENEURISM ≈ LIBERTARIAN PATERNALISM

Hank Greely has called on academics, scientists, and, well, whoever else reads academic and scientific journals, to lead us on the path toward increased “public understanding of cognitive enhancement.” Greely assumes “new laws and regulatory agencies” will not be necessary—(existing laws could simply be adjusted)—and he seems to be suggesting that regulatory agencies should go right ahead and start allowing pharmaceutical companies “to market cognition enhancing drugs to healthy adults.”

The “education” that would lead to “public understanding” would be provided by physicians, teachers, college health centers and employers, “similar to the way that information about nutrition, recreational drugs and other public-health information is now disseminated.” And, “ideally,” this education “would also involve discussions of different ways of enhancing cognition, including adequate sleep, exercise and education, and an examination of the social values and pressures that make cognitive enhancement so attractive and even, seemingly, necessary.”

“Education” alone, however, is unlikely to bring about the public’s acceptance. The dissemination of cold, hard facts can rarely change or override the powerful and automatic emotional responses people are likely to experience—only stronger emotional responses can do so. Proponents would thus need to go further than merely spelling out the “rational arguments” or the “social values” that make cognition enhancement a good idea. Everyone probably already agrees, in a vacuum, that “innovation” would be a “good” idea.
And even assuming the Food and Drug Administration (“FDA”) regulators could be persuaded, it could be counterproductive for pharmaceutical companies to begin marketing cognition enhancers to the healthy prior to acquiring widespread public support for enhancement. The fact that it was not necessary to ask first whether the public “agreed” is not going to stop the public from voicing the type of outrage that could put the brakes on the whole plan. Consider this 2001 excerpt from TIME Magazine:

Suddenly, stem cells are everywhere. Once relegated to the depths of esoteric health journals, the microscopic clusters have made their way to the nation’s front pages. The complexity and drama surrounding these relatively simple cells has increased due to a ticking clock: By the end of the month, President Bush is scheduled to decide whether to continue federal funding for stem cell research.\(^\text{142}\)

Greely is right when he says cognitive enhancement is what we do when we get “adequate sleep, exercise,” go to school, drink coffee, use calculators, and so on—but this explanation is unlikely to persuade humans whose automatic sentiment is that a “pill” is still somehow “different” in a “bad” way. Humans will still sense an inarticulable difference even if they comprehend the fact that there is no such difference (much like when they are asked whether they would push the fat man onto the tracks to stop the trolley).\(^\text{143}\) If the New York Times were to point out that there is no rational basis for staking one’s happiness on the success or failure of a professional sports team, would everyone slowly stop watching football? No.

In this section, I argue that, for permissive use of cognition enhancing drugs by the healthy to become a reality, a “moral entrepreneur” (acting as a “libertarian paternalist”) would need to take up the cause energetically and use the findings of cognitive and behavioral science to the same ends as the Partnership for a Drug-Free America did when they took up the utilitarian goal of preventing drug use.

**A. The Nature of Utilitarian Moral Entrepreneurism**

Politicians know better than anyone to watch what they say. The wrong gesture—the wrong whisper—replayed in the wrong context, can be a media disaster. President Barack Obama called Kanye West a “jackass” prior to a CNBC interview, thinking he was speaking off the record, and then, as laughter erupted among the reporters present, he pleaded with them to keep the joke under wraps, “[Because], I remember last time,” he said, “there was the fly thing.”\(^\text{144}\)

President Obama was referring to a fly he killed while in the middle of giving a press conference—after which, the media went on and on about the President’s fly-killing prowess. The CNBC interviewer responded, laughing, “No, that worked out well for you—you were a ninja.” To which Obama replied (just before the audio cuts out), “Except, PETA…”\(^\text{145}\)

Indeed, the People for the Ethical Treatment of Animals (“PETA”) called the incident an “execution.”\(^\text{145}\) A fly was distracting the President during a speech—resulting in a
morally catastrophic murder. "We believe that people, where they can be compassionate, should be, for all animals," a PETA spokesman explained.\textsuperscript{146}

Like the Partnership for a Drug-Free America, PETA is a nonprofit group devoted to spreading an immodest and authoritative moral message: animals belong in our utilitarian calculus too. And, like the Partnership for a Drug-Free America, PETA does not simply try to "educate the people" or merely list the "facts"—PETA tries to steal attention any way that it can in order to elicit strong automatic emotional responses. PETA is known for stunts like "infiltrating fashion shows and unfurling signs that read (in one instance) 'Gisele: Fur Scum.'"\textsuperscript{147} And one of PETA's "most shocking (and perhaps [most] effective) ploys has been to display on its website actual footage of dogs being abused and slaughtered in China."\textsuperscript{148} PETA has also tried to recruit celebrity endorsements. When a magazine reported that Ben Affleck had purchased a chinchilla coat for Jennifer Lopez, PETA sent Affleck a letter (accompanied by an actual video) showing the process by which nearly one hundred chinchillas were killed to make the garment:

The preferred method of killing chinchillas is by genital electrocution: a method whereby the handler attaches an alligator clamp to the animal's ear and another to her genitalia and flips a switch, sending a jolt of electricity through her skin down the length of her body. The electrical current causes unbearable muscle pain, at the same time working as a paralyzing agent, preventing the animal from screaming or fighting.\textsuperscript{149}

Affleck wrote back to say his eyes had been opened and he will never again be a part of such cruelty and barbarism.\textsuperscript{150} Tally another convert for the group that boasts millions in donations, millions of members, and millions of hits on its website.\textsuperscript{151}

So, then, which is more likely to come to pass: the entire world turning vegan—i.e., citizens of the United States ceasing consumption of all animal products, including eggs and milk—or the United States amending its regulations for the permissive use of cognition enhancing drugs by the healthy? At present, there is no way to know; there has not yet been a poll taken among a sufficiently random sampling of the average lay public in regard to cognitive enhancement. And of PETA's million-plus supporters, many may join up or donate for the sake of dogs and cats treated inhumanely abroad while still having no intention of foregoing their burgers. But even without polling, it may still make sense to assume PETA's extreme goal of animal equality is much farther along on the road toward public support. Even if most of PETA's millions don't ever indeed to give up their burgers, their membership or their endorsement of a fragment of PETA's cause arguably indicates that they've been made to feel guilt or sympathy. By exposing humans to vivid images and accounts of animal cruelty and the brutal processes by which animals are converted to dinner, PETA has at least made it so that the millions it counts as supporters—even if they continue to eat their burgers—will not feel self-righteous in doing so, and will be much less likely to feel morally indignant in response to those who say they should not be eating burgers. If anything, they will likely feel guilt. If those whose automatic intuition is to oppose cognition enhancement were made to feel guilty for doing so, this emotional response could potentially override the indignation
and self-righteousness they would experience and express as opponents. It is the latter sentiments that form the bulwark of a stalwart opposition.

PETA was founded in 1980 by a woman named Ingrid Newkirk, who was spurred to action after reading Princeton bioethics professor (and famed utilitarian) Peter Singer’s groundbreaking book *Animal Liberation*. Judge Richard Posner, who has said he finds Singer’s brand of utilitarianism impractical, has nevertheless agreed that shock-provoking appeals to the moral emotions are probably the best way to persuade people to rethink a deeply ingrained belief or value. Posner criticizes “academic moralists” who he says are naïve in believing that, if only they can persuade people that they “ought to do something because it is the moral thing to do, this recognition, this acceptance…will furnish a motive to do it.” That is simply not the case, says Posner. If that “right” thing to do does not come naturally, then one would also have to be the type of person who obtains satisfaction from doing what he or she believes is accepted as the “right” thing to do. [W]hen,” Posner asks, “was the last time a moral code was changed by rational persuasion” alone? A “rational” moral code does not speak for itself; there is always the problem of human motivation.

Next to the “academic moralist,” Posner juxtaposes the “moral entrepreneur”—the “moral entrepreneur” is the person who actually knows how to do some persuading. Moral entrepreneurs are like “arbitrageurs in the securities markets…They spot the discrepancy between the existing code and the changing environment and persuade the society to adopt a new, more adaptive code.

They don’t do this with arguments…[r]ather, they mix appeals to self-interest with emotional appeals that bypass our rational calculating faculty and stir inarticulable feelings of oneness with or separateness from the people…

Religions know that to motivate people to act against or outside their normal conception of self-interest requires carrots and sticks, rituals to build a sense of community, habituation…[t]he military knows, and early Christianity knew, that motivating people to sacrifice or to risk their lives requires psychology to forge group loyalties and often the promise of posthumous rewards, whether salvation or glory. You won’t get far by trying to persuade people that your cause is, upon reflection, morally best.

Posner seems quite right, although a moral entrepreneur’s evocation of the right emotional responses will probably be more important for persuasion than any promise of external incentives. After all, it is our emotions that provide our incentives in the first place. For instance, Yale law professor Dan Kahan has shown that, because we are “emotional and moral reciprocators who loathe being taken advantage of” but otherwise want to “understand [ourselves] and be understood by others as fair,” our perceptions of whether or not others are paying their taxes will be the greatest indicator of whether we will feel bound to pay our taxes, irrespective of any change in penalty or in the probability of being caught. Kahan cites an experiment that tested the affects of the 1986 Tax Reform Act on levels of compliance; the results showed no correlation between tax code compliance and relative tax burden. “What did shift patters of compliance,” he explains, “were the types of interactions that individuals had with other taxpayers in the months leading up to the reform: those who encountered others who
expressed a positive attitude toward, and commitment to complying with, the Tax Reform Act displayed greater commitment to complying with it themselves, whereas those who encountered others who expressed negative attitudes displayed less commitment.\textsuperscript{164}

Here we find one dramatic and counterintuitive conclusion for use by the moral entrepreneur. “The mechanism for these effects,” says Kahan, “appears to be social cueing.”\textsuperscript{165}

When government engages in dramatic gestures to make individuals aware that the penalties for tax evasion are being increased, it also causes individuals to infer that more taxpayers than they thought are choosing to cheat. This distrust of one’s neighbors triggers a reciprocal motive to evade, which dominates the greater material incentive to comply associated with the higher-than-expected penalty.\textsuperscript{166}

In other words, calls for “drug testing before exams,” for instance, and reports that students are using cognition-enhancing drugs without prescriptions (illegally, that is) as study aids and for taking exams, are likely to have a strong signaling effect—but what exactly are these reports signaling? One might assume the common response from those who do not use enhancers illegally would be gross indignation and feelings of contempt toward the cheaters, as well as toward the prospect of permissive cognition enhancement in general. And this may very well be true. However, is it possible that the indignant critics, if truly given the opportunity, would actually then be more inclined to begin using cognition enhancers themselves rather than to continue to protest a transgression they likely see as inevitable and unpreventable in reality? (I mean, is it likely that drug testing before, say, the Law School Admissions Test, will become feasible?—it would be a huge cost for the small benefit of appeasing indignant critics who are likely to still take the test anyway; and it would be tricky to decide what substances should be permissible and what should not be permissible—what about Piracetam,\textsuperscript{167} for instance?—and there could be a mess of constitutional questions in light of the fact that certain public institutions require students to take the test.

All in all, a keen moral entrepreneur might seize upon the fact that indignant critics of cognition enhancement who voice the “cheater concern” may be among the first and easiest converts to the cause. Just like those who feel like “suckers” when they find out others have not been paying their taxes, those who are indignant toward permissive cognition enhancement could be the first in line ready and willing to join in on the “cheating” should it become as safe and feasible for them as is, say, illegal downloading of music.

Moral entrepreneurs may also attempt to exploit the well-documented effects of “framing.” Remember, in Part I, we saw that losses loom larger than gains. Cass Sunstein has said one solution to this irrational tendency is for the libertarian paternalist (or, moral entrepreneur) to frame gains as losses.\textsuperscript{168} Instead of arguing that “doing X would be beneficial to you and everyone else,” the entrepreneur might explain that “you (or, we) cannot afford to not do X.”\textsuperscript{169} It is true that one can get carried away with framing, but its implications should not be understated. Sunstein says that when it
comes to environmental regulation, it would be a good idea to “insist that policymakers are trying to ‘restore’ water or air quality to its state at date X; a proposal to ‘improve’ air or water quality from date Y may ‘code’ quite differently. The restoration time matters a great deal to people’s judgment.” From there, one could imagine cognitive enhancement proponents claiming that “we” must “restore” America to its “rightful” level or productivity or restore America to its rightful place as the most innovative nation.

“Extremeness aversion” is another cognitive bias that might be used by the libertarian paternalist turned moral entrepreneur. “People are averse to extremes,” Sunstein explains, and “[w]hether an option is extreme depends on the stated alternatives.” Furthermore, extremeness aversion “gives rise to compromise effects. As between given alternatives, people seek a compromise.”

In other words, an entrepreneur might explain that we are in danger of losing ground as a powerful nation and we must be practical—no one is calling for anything so extreme as genetic enhancement (we are not at a point where we must install chips in human brains), but we are foolish if we do not take advantage of the technologies we possess, which are really much more akin to those that are already in widespread use, such as caffeine.

Of course, I am by no means saying that such an approach would be successful or even desirable. These examples do not come close to forming a complete “game plan” for proponents of cognition enhancement. Furthermore, there is a thin line between libertarian paternalism and deleterious coercion, and it is for others to decide where that line is—or, should be—drawn. The foregoing hypotheticals are meant only to illustrate that, just as inherent biases, intuitions, logical fallacies, and motivational distortions can render sound, rational ideas implausible to humans, these same hard-wired decision-making flaws can play a role in engendering support for such ideas.

Cass Sunstein has said, “The concept behind libertarian paternalism is that it is possible to maintain freedom of choice—that’s libertarian—while also moving people in directions that make their own lives a bit better—that’s paternalism. We think it’s possible to combine two reviled concepts.” Of course, it is also an open question whether—and when—people’s lives would even become better if the goal of engendering widespread support for cognitive enhancement is achieved. But, what we do know is that if humans are predisposed to self-righteous indignation in opposition—to any idea—we will never find out what good could have come. And, ultimately, the tactics of libertarian paternalism are no different than the type of marketing that has been used by the Partnership for a Drug-Free America, as well as by PETA in the interest of animal welfare. Still, I would like to further address the issue of deceit and exploitation in the section that follows.

B. Drawing the Line between Libertarian Paternalism and Deceitful Manipulation
Even though everyone might want to appear fair and act cooperatively so long as everyone else does the same, there will always be cheaters who experience emotions like sympathy, shame, and guilt to a lesser extent than the norm. If this were not true, there would be little need for police and criminal law. Nicholas Wade, a New York Times science reporter and the author of *The Faith Instinct: How Religion Evolved and Why It Endures*, suggests that religion has occurred “in societies at every stage of development and in every region of the world,” ultimately because it served as “an invisible government.”"¹⁷⁶ “The ancestral human population of 50,000 years ago, to judge from living hunter-gatherers, would have lived in small, egalitarian groups without chiefs or headmen,” Wade explains.¹⁷⁷ It was religion, then, that ensured the people would “put their community’s needs ahead of their own . . . [f]or fear of divine punishment.”

With the enlightenment came the intellectual in-group norm of epistemic virtue.¹⁷⁸ Dogma was deemed dangerous. Arbitrary claims to authority were to be challenged, received wisdom was to be scrutinized, and “reason” was to take center stage as the only means to ascertaining “truth.” Human capacity for reason brought us Immanuel Kant’s slightly misguided idealism, but it also brought us liberal democracy. The judge moved from the heavens to the bench. The dictates of the various religions—and the religions themselves—arguably unnecessary in a world of constitutionally protected rights, criminal statutes, police, checks and balances, and markets—carry on as anachronisms in the industrialized democracies. But we are today, as a people, willing to allow religious leaders a place in our discourse even though they prey on the cognitive fallibility of humans to generate mass support for the oppression and persecution of homosexuals, for instance.

Kant and Rawls might find it improper to use the vestiges of evolutionary history deceptively to persuade people to support anything—to these thinkers, such means are not justified by the ends.¹⁷⁹ But Kant is now officially a vestige of an era a bit too enamored by the peoples’ potential for rationality. And if we find it tolerable today that religious groups can use deception to convince the masses that being gay is a sin and that abstinence-only sex education is sound policy—if we find it tolerable that PETA can use shock-tactics that target the “availability heuristic”¹⁸⁰ to garner support for animal welfare—if we find it tolerable that the same tactics that were used by the Nazis to dehumanize the Jews were used by paternalists to dehumanize adolescent drug users—if we find it tolerable that “going green” is now somehow the “cool” (i.e., “moral”) thing to do—if we find it tolerable to perpetuate the basic notion of “free will” even if the latest science causes us to question whether we can ever truly be “responsible” for our actions¹⁸¹—if we find it tolerable that the U.S. Constitution may not have ever survived if not for some prodding and persuading of the masses with respect to the virtues of civic engagement and the principles and merits of constitutional government¹⁸²—then how could we ever find it intolerable that moral entrepreneurs engage in the marketing of utilitarian policies that stand to offer non-zero-sum returns?

It is another story entirely to suggest that the government should directly mislead its citizens. But policy advocates are mere citizens themselves, as are moral entrepreneurs. In a sense, the “exploitation” debate raised here is similar to the debate
over physicians prescribing placebos. Whether placebos are justifiable is an open question upon which reasonable minds may disagree—and disagree they should, until consensus forms around the best rational argument. There is no perfect means for deciding when “beneficent deception” is or is not justifiable; however, marketing is what it is, and those best equipped to analyze costs and benefits critically and empirically should not hand down their findings from a pedestal “above” the tools of marketing if they expect their findings to have an impact on decision-making among lay people.

CONCLUSION

When taken to its logical extremes, utilitarianism can give itself a bad reputation. Debating Judge Richard Posner on the proper scope of human duty to animals, Peter Singer admitted that if the pain a child suffers from the bite of a dog would be less than the pain the dog suffers from human intervention to prevent the bite, the dog must be left to bite. To this, Judge Posner replied that there are perhaps some human intuitions that even the most persuasive utilitarian might never be able to dissuade. But, at the same time, utilitarianism cannot be “counted out.” Joshua Greene has noted that “[n]early everyone agrees . . . all other things being equal, raising someone’s level of happiness, either your own or someone else’s, is a good thing, and . . . lowering someone’s happiness is a bad thing.” It seems that utilitarianism and deontology will battle on, just as individual and collective interests in general are destined to battle on. For now, we can only hope to deal reasonably and pragmatically with the truths we are able to discover about the nature of human existence.

In this article, I have set out a descriptive account of human morality and rationality rooted in contemporary moral psychology, cognitive science, and evolutionary theory. I have examined our many hard-wired and learned strategies, and I have noted that these strategies serve us well in many circumstances, but, as Jeffrey Rachalniski says, “they also create vulnerability to the predations of advertisers, political spin doctors, trial attorneys, and ordinary con artists.”

From there, I set out a normative claim: that, in light of the cognitive fallibility of humans, advocates for the permissive use of cognition-enhancing drugs by the healthy—if they hope to engender enough public support—probably need to look to the decidedly non-Kantian methods of moral entrepreneurism and must account not only for the cognitive flaws that can engender automatic opposition to utilitarian initiatives but also those which can potentially sway indignant opponents the other way. With the caveat that I was by no means presenting a complete “game plan,” nor even advocating for such policy change myself, I argued that these methods might simply be objectively necessary to such a pursuit, meanwhile their use can be justified under Cass Sunstein’s banner of “libertarian paternalism.” Furthermore, I noted that moral entrepreneurism has been behind the most influential moral movements of history (including: Nazism, the Partnership for a Drug-Free America’s 1980s anti-drug campaign, PETA’s animal-welfare efforts, the U.S. civil rights movement, the global “go green” initiative, the
Church’s ever-present bigotry and intolerance, and even, perhaps, the founding fathers’ initial promotion of constitutionalism).

Cognitive science plays a large role in this article, so I would like to add a brief note about the mixing of disciplines. Today, formal psychology is seen as a relatively new and distinct field of inquiry, having arrived little more than a century ago with the work of Wilhelm Wundt and William James. But from a broader standpoint, psychology is, and has always been, the very core of all human inquiry. The division of labor, specialization, expertise—these modernizations have left us with terms like “interdisciplinary approach”—but early Western thinkers were “renaissance men” for the simple reason that the questions, “Why did he do that?” and “What was he thinking?” have been pertinent to the understanding of just about every human social interaction since the beginning of recorded history. Law, economics, moral philosophy, political science—these are wholly distinct concentrations that college freshmen and doctoral advisers alike must choose from. But these disciplines manifest themselves in perfect harmony at any dinner table where siblings conspire and compete while parents manipulate beliefs and incentives in order to enforce rules based on moral intuitions and community norms. In other words, the ideas and theories discussed in this article (especially those that are empirically verified) are too important to be ignored. Every discipline concerned with human social arrangements—law, political theory, economics, sociology, philosophy, and, perhaps most especially, journalism—must begin to take an “interdisciplinary approach” that accounts for the most up-to-date understandings of the human mind, in order to avoid inadvertently relying on outdated assumptions or “nibbl[ing] at the edge of stale ideas.”

In the end, “If experienced hucksters can identify defects in people’s reasoning processes as part of an effort to swindle them or spread hate, or sell cereal, then policy advocates, who have only the collective welfare in mind, should arguably be utilizing the human cognitive defects for the “greater good.” Otherwise, their advocacy is liable to be drowned out or ignored.

All that said, there remains the interesting question whether human behavior and decision-making might change or improve “once we have an understanding of the operative principles of our moral knowledge and broadcast these principles to an interested public.” Marc Hauser, Professor of Psychology, Organismic and Evolutionary Biology, and Biological Anthropology at Harvard, suggests in his book *Moral Minds* that “the moral faculty may guard its principles but once its guard has been penetrated [by self-knowledge],” we might be able to “use these principles to guide how we consciously reason about morally permissible actions.” This could also mean strategic engineering (i.e., via libertarian paternalism and moral entrepreneurism) might become a less effective means to persuasion, as humans may come to recognize such “marketing ploys” as manipulative.

The possibility indeed remains open; however, Hauser speaks of broadcasting these principles to an “interested” public—meanwhile, it might take some strategic engineering just to engage the public’s interest in the first place!
Perhaps a more concrete question is whether an article like this one—touting the importance of “framing” and suggesting that such engineering may be a necessary element of persuasion—could itself undermine the success of such engineering. In other words, “[D]o the motives and strategies of moral entrepreneurs have to remain hidden to work effectively?”

To this there is no clear answer either; however, if intelligence indeed evolved in the context of cooperation and competition—as an escalating battle between “cheaters” and “cheater detectors”—the battle may well continue. Strategic engineering may often be rendered useless by quick-witted “cheater detectors”—for instance, we may now look back and laugh at Lyndon Johnson’s “Daisy Girl” campaign ad, in which a sweet little girl counts down daisy petals until a nuclear bomb explodes on the screen amidst the implication that Barry Goldwater would invite mutually assured destruction if elected. But the cognitive arms race apparently continues—ploys simply become more and more sophisticated until the “cheater detectors” catch up and so on.

Looking back, from the “Daisy Girl” ad, to the egg in the frying pan, to PETA, I suspect that the underlying motives of marketers have always been somewhat clear to a majority of the lay public. I suspect this is the case with most contemporary advertising. The presentation tactics have long been strategic, but as the persuasive power of certain tactics wane with time, new tactics emerge and are generally only more strategic. Rigorous reason-based decision-making among the masses is surely something to pine for, but widespread in-depth self-knowledge is its prerequisite. Until then, the soundbite rules.

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1 Partnership for a Drug Free America, “This is Your Brain on Drugs,” http://www.youtube.com/watch?v=3FtNm9GqA6U.
3 See id.
5 Id. at 1323.
6 See STEVEN PINKER, THE BLANK SLATE: THE MODERN DENIAL OF HUMAN NATURE 274 (2002) (“When someone strips a person of dignity . . . ordinary people’s compassion can evaporate and they find it easy to treat him like an animal or object.”).
7 See id; see also Edward L. Glaeser, Paternalism and Psychology, 73 U. CHI. L. REV. 133, 152 (2006) (noting that soft paternalism can lead to the undesirable perception that those who engage in certain behaviors are “unattractive human beings”).
9 See STEVEN PINKER, HOW THE MIND WORKS 370 (1997) “[T]he emotions are adaptations, well-engineered software modules that work in harmony with the intellect and are indispensable to the functioning of the whole mind.” Id. Furthermore:
Once triggered by a propitious moment, an emotion triggers the cascade of subgoals and sub-subgoals that we call thinking and acting. Because the goals and means are woven into a multiply nested control structure of subgoals within subgoals within subgoals, no sharp line divides thinking from feeling, nor does thinking inevitably precede feeling or vice versa.

Id. ("The passions are no vestige of an animal past, no wellspring of creativity, no enemy of the intellect. The intellect is designed to relinquish control to the passions so that they may serve as guarantors of its offers, promises, and threats against suspicions that they are lowballs, doublecrosses, and bluffs.") Id. at 412.

10 See generally, Cass Sunstein, Behavioral Analysis of Law, 64 U. Chi. L. Rev. 1175, 1178 (1997) ("Much of this work calls for qualifications of rational choice models.").


12 See Sunstein, supra note 10, at 1178.

13 Those who deride our "sound-bite" discourse and preach the intellectual in-group norm of epistemic virtue are trapped in a paradox. When it comes to using rational arguments to advocate epistemic virtue, the preacher will not be able to persuade the congregation until the congregation has already been persuaded.

14 See Pinker, supra note 6, at 274–75 ("And the good reasons for a moral position are not pulled out of thin air: they always have to do with what makes people better off or worse off, and are grounded in the logic that we have to treat other people in the way that we demand they treat us.").

15 Sunstein calls for "anti-antipaternalism," which is basically to say maybe we should reconsider flat out knee-jerk rejections of paternalism. See Sunstein, supra note 10, at 1178.


17 See id. at 179 (describing "libertarian paternalism" as an approach that preserves freedom of choice but that authorizes both private and public institutions to steer people in directions that will promote their welfare).

18 See id. at 175–79.

19 Id.

20 Id.

21 "Cognitive enhancement may be defined as the amplification or extension of core capacities of the mind through improvement or augmentation of internal or external information processing systems." Nick Bostrom and Anders Sandberg, Cognitive Enhancement: Methods, Ethics, Regulatory Challenges 1, http://www.nickbostrom.com/cognitive.pdf.

22 For instance, the animal welfare movement and the "go green" initiative.

23 Cf. Sunstein, supra note 10, at 1179 ("Contrary to economic theory, people do not treat out-of-pocket costs and opportunity costs as if they were equivalent.").


25 Id.

26 Id.

27 Id.

28 Id.

29 See Pinker, supra note 6, at 302–04.


31 See Trivers, supra note 30; Pinker, supra note 6, at 269–75.

32 See Pinker, supra note 5, at 271 (explaining that the moral emotions frame our moral judgments).

33 See Richard A. Posner, THE PROBLEMATICS OF MORAL AND LEGAL THEORY 19 (1999) ("Every society . . . has had a moral code, but a code shaped by the exigencies of life in that society."); Pinker, supra note 9,
infra B piece asks, "Should Adderall be against the honor code?" Stephanie Rudolph, at 6 ([W]hat counts as murder . . . varies enormously from society to society.").

See RICHARD DAWKINS, THE SELFISH GENE, at vii (1976) ("We are survival machines—robot vehicles blindly programmed to preserve the selfish molecules known as genes.")

See PINKER, supra note 9, at 373 ("The emotions are mechanisms that set the brain’s highest-level goals.")

See PINKER, supra note 6, 274–75.

id.

Henry Greely et al., Towards Responsible Use of Cognitive-Enhancing Drugs by the Healthy, 456 NATURE 702, Dec. 11, 2008.

id. at 705.

In some “games” (like baseball, for instance), team B necessarily "loses" when the star player on team A hits a game-winning home run. But when it comes to innovation, no one has to be a "loser"—if an individual scientist develops an alternative source of energy, everyone “wins.”

Greely, supra note 39.

See generally, JEREMY BENTHAM, INTRODUCTION TO THE PRINCIPLES OF MORALS AND LEGISLATION ch. 1 (1789) ("By the principle of utility is meant that principle which approves or disapproves of every action whatsoever according to the tendency it appears to have to augment or diminish the happiness of the party whose interest is in question.")

See BAILEY KUKLIN AND JEFFREY W. STEMPEL, FOUNDATIONS OF THE LAW: AN INTERDISCIPLINARY AND JURISPRUDENTIAL PRIMER ch. 1 (1994) ("A state of affairs is better, under this version, when aggregated goodness (often expressed in utility) is increased, even when some individuals suffer losses in order to facilitate greater gains by others.")

Nick Bostrom, The Infinitarian Challenge to Aggregative Ethics 1 (2008), http://www.nickbostrom.com/ethics/infinite.pdf (asking how, if the universe is infinite, can we decide the scope of our utilitarian calculus?).

See Margaret Talbot, Brain Gain, THE NEW YORKER, Apr. 27, 2009.

id. at 36.


FRANCIS FUKUYAMA, OUR POSTHUMAN FUTURE: CONSEQUENCES OF THE BIOTECHNOLOGY REVOLUTION 82 (2003); Bostrom and Sandberg, supra note 21, at 34.

id.

id. at 33.

FUKUYAMA, supra note 50, at 208.

Benedict Carey, Brain Enhancement is Wrong, Right?, N.Y. TIMES, March 9, 2008.

See KUKLIN AND STEMPEL, supra note 44.

IMMANUEL KANT, FUNDAMENTAL PRINCIPLES OF THE METAPHYSICS OF MORALS (1785).

See id.

id.

Greely, supra note 39 ("Good policy is based on good information.")

id. at 38 (suggesting that public policy could anticipate certain concerns and preempt them with safeguards).

In one instance, the precise headline read: Is there Honor in Adderall. And the first sentence of the piece asks, "Should Adderall be against the honor code?" Stephanie Rudolph, Is there Honor in Adderall, Bi-COLLEGE NEWS ONLINE, Apr. 6, 2004, http://www.biconews.com/?p=3780. For more examples, see infra note 62.
See, e.g., Editorial: Just Say No to Study Drugs, DUKE CHRONICLE, Jan. 13, 2009 (“It is . . . a morally reprehensible means to get ahead in class. . . . Like other forms of academic dishonesty, this behavior gives its users an unfair advantage over others. . . . [It] is as dishonest as plagiarism and cheating on an exam.”); Neil Tambe, Culture of Immorality Needs a Hero, MICHIGAN DAILY, Mar. 5, 2009 (“[It] provides an unnatural ability to focus . . . just like steroids. . . . Our campus could use more people like Atticus Finch.”); Michael Bromberg, Adderall Addiction too Prevalent in Schools, UCLA DAILY BRUIN, Nov. 26, 2008 (“At a school as prestigious as UCLA, what will eventually come from a generation of kids reliant on drugs to pass a class?”); Fenan Solomon, Adderall: Asleep to the Implications, UNIVERSITY OF MARYLAND - THE DIAMONDBACK, Oct. 24, 2008 (“So what happens to the students who take Adderall and break the curve? Where’s that in the honor code we sign before every exam? It’s nowhere to be found because the academic norms haven’t been adjusted to address this issue as the norms have adapted in the world of sports.”); Editorial: Adderall Not to Be Ignored, THE MIAMI HURRICANE, Sep. 17, 2008 (“While Barry Bonds defends his position on steroid use, thousands of college students continue to consume Adderall. . . . [Y]ou’re not using it to be a better student: you’re a drug user.”). This is just a small sampling of my LexisNexis University Wire search results. (University Wire is a service that archives college newspaper articles.)

Bostrom and Sandberg, supra note 21, at 43 (“People with high social capital and good information get access while others are excluded.”).

Some people will surely never want to enhance their cognition at all, even with zero risk.

See JOHN RAWLS, A THEORY OF JUSTICE 273–77 (1971) (explaining that neither moral worth nor moral desert constitute one’s claims in such a scenario, but rather, “when just economic arrangements exist, the claims of individuals are properly settled by reference to the rules and precepts . . . which these practices take as relevant.”).

An externality is a cost or benefit of an action that the actor does not personally incur; thus, theoretically, the actor would not take such a cost or benefit into account when deciding beforehand whether or not to engage in the conduct. See WILLIAM J. BAUMOL & ALAN S. BLINDER, MICROECONOMICS: PRINCIPLES AND POLICIES 234–35 (9th ed. 2003). For instance, if I own a factory that causes pollution in a nearby town, but I do not live in that town, I do not have to endure the cost of living in a polluted town, so that is a cost external to my business. Whether or not I will actually consider the cost or the consequences of causing pollution is another story, but this is, at least, the theory behind external costs. Id.


See RAWLS, supra note 65, at 11.

Id.

Id.

Id. at 65 (“The intuitive idea is that the social order is not to establish and secure the more attractive prospects of those better off unless doing so is to the advantage of those less fortunate.”)

Rawls criticized utilitarianism for its failure to take sincere account of the distinctions between persons. Id. at 156–57. Meanwhile, Michael Sandel has pointed out that Rawls’s difference principle is similarly guilty of ignoring the distinctions between persons and that this should technically be fatal to a deontological theory, because self-ownership is the essential justification for our first-order fundamental rights of freedom of speech, freedom of conscience, and religious liberty, etc. See, MICHAEL SANDEL, LIBERALISM AND THE LIMITS OF JUSTICE 140 (1998). Plus, if we do not own our socially desirable conduct, how can we be accountable for our undesirable conduct?

See PINKER, supra note 6, 274–75.


Kuklin, at 26. FR one’s ab model based on “adaptive rationality” by which any goal is plausibly rational if it does not “compromise 81 animals must solve.”). All animals need circuits that govern what they eat—knowing what is safe to eat is a problem that all animals must solve.”). See also, Robert Frank, Commitment Problems in the Theory of Rational Choice, 81 TEX. L. REV. 1789, 1796 (2002–2003) (arguing that one could formulate a compelling rational choice model based on “adaptive rationality” by which any goal is plausibly rational if it does not “compromise one’s ability to acquire and hold resources in competitive environments”). See generally, Matt Ridley, The Red Queen: Sex and the Evolution of Human Nature (1993); Robert Frank, Choosing the Right Pond: Human Behavior and the Quest for Status (1985); Robert Frank, Passions Within Reason: The Strategic Role of the Emotions (1999); Kuklin, supra note 108, at 26.

See Pinker, supra note 9, at 429 (“The love of kin comes naturally; the love of non-kin does not.”); Kuklin, supra note 108, at 6 (“Kin selection is based on the proposition that one may enlarge one’s
contribution to the gene pool not only through one’s direct descendent, but also through those who are genetically related.

113 See Trivers, supra note 108; Haidt, supra note 83.
114 See Robert Axelrod, Tit for Tat, in COMMON THEMES IN PRIMATE ETHICS 88–91 (Peter Singer ed. 1994) (explaining that the best strategy for an iterated Prisoner’s Dilemma is “tit for tat”—cooperate on the first move, and then do whatever your opponent does for every move after that).
115 Irrationality helps because sometimes it is important for people to believe you are not in control of your actions. This is how you win a game like “Chicken” (where two people drive straight at each other to see who will swerve first). In real life, that came is called mutually
actions. This is how you win a game like “Chicken” (where two people drive straight at each other to see
next move, and then do whatever your opponent does for every move after that).
116 See generally, FRANK, supra note 112.
117 PINKER, supra note 9, at 404.
118 See Trivers, supra note 108 and accompanying text.
119 See id.; See PINKER, supra note 9, at 404.
120 See PINKER, supra note 9, at 404.
121 Id.
122 Id.
123 Id.
124 Id. at 405.
125 Frank, supra note 115, at 104.
126 Cosmides & Tooby, supra note 110, at 20–21.
127 See PINKER, supra note 9, at 336.
128 See id.; Cosmides & Tooby, supra note 110, at 20–21.
129 See sources cited supra note 115 and accompanying text.
130 Frank, supra note 115, at 94–95.
131 Classical rational choice presumes humans calculate costs and benefits and act in their self-interest.
Id. at 91.
132 Frank, supra note 115, at 94–95.
133 Id. See also, Axelrod, supra note 114, at 88–92.
134 Frank, supra note 116, at 96–98; Axelrod, supra note 114, at 88–92.
136 Trivers, supra note 135; Babcock and Loewenstein, supra note 135. See also, supra note 13 and accompanying text.
137 Greely, supra note 39, at 705.
138 Id.
139 Id.
140 Id.
141 See sources cited supra note 9.
143 See POSNER, supra note 33, at 42 (noting that certain moral questions “stir inarticulable feelings”).
144 The audio can be retrieved here: http://www.youtube.com/watch?v=z4Oh8xqMyWo, at forty-nine
seconds in (last visited December 7, 2009).
146 Id.
148 See Miller, supra note 147, at 1008.
149 Specter, supra note 147, at 52.
150 Id.
Miller, supra note 147, at n.58 (“Newkirk founded PETA in 1980; today the group boasts over two million members, annual donations in excess of $25 million, and over 50 million hits received at its various websites. For more information, see People for the Ethical Treatment of Animals, About, http://www.peta.org/about”).

Specter, supra note 147, at 60.

Singer has agreed that we must kill a baby before a dog if the dog suffers more. See Richard A. Posner & Peter Singer, E-mail Debates of Noteworthy Topics: Animal Rights, SLATE, Jun. 12, 2001, http://www.slate.com/id/110101/entry/110109/.

Id.; Miller, supra note 147, at n.103 (“Posner argues that humans already grasp thoroughly that animals feel pain and that ‘to inflict pain without a reason is bad’; thus, it is an altogether different task to persuade humans to stop causing animals pain. CITE my note citing debate.”).

POSNER, supra note 33, at 39.

Id.

Id. at 42.

Id.

id. (“Moral entrepreneurs try to change the boundaries of altruism, whether by broadening them, as in the case of Jesus Christ and Jeremy Bentham, or by narrowing them, as in the case of Hitler.”)

Id. at 44.

Id. at 42–43.


Id. at 81.

Id. at 81–82.

Id. at 83.

Id.

Piracetam is a “nootropic” that has been proven to enhance memory and is not regulated by the FDA, thus it can be purchased legally on the internet in the United States.

See Sunstein, supra note 10, at 1180.

Id.

Id.

Id. Americans love to believe America is “number one” (for the same reasons they love to “root for the home team”).

Another example of the framing effect—an amusingly relevant one in fact—concerns Robert Nozick’s experimental attempt to undermine utilitarianism. Nozick had asked if people would be willing to plug into a sort of virtual reality experience machine—once in, they would absolutely believe their experiences were real—and all their experiences would be pleasurable. And he assumed people would largely reject the idea. See ROBERT NOZICK, ANARCHY, STATE, AND UTOPIA 42–43 (1974). But experimental philosopher Joshua Knobe has pointed out that if people are told they have been in the experience machine the whole time and asked if they would like to join reality (essentially the plot of the film The Matrix), they will prefer the machine. In both ways of framing the question, Knobe attributes the differential responses to the status quo bias. See Joshua Knobe, Would You Be Willing to Enter the Matrix, PSYCHOLOGY TODAY, April 13, 2008, available at http://www.psychologytoday.com/blog/experiments-in-philosophy/200804/would-you-be-willing-enter-the-matrix.

Sunstein, supra note 10, at 1181.

Id.

Id.


Id.


Rawls, supra note 65, at 115 (“The publicity condition is clearly implicit in Kant’s doctrine of the categorical imperative insofar as it requires us to act in accordance with principles that one would be willing as a rational being to enact as law for a kingdom of ends.”).
People tend to think that risks are more serious when an incident is readily called to mind or 'available.'" Sunstein, supra note 10, at 1188.

Compare Joshua Greene and Jonathan Cohen, For the Law, Neuroscience Changes Nothing and Everything, 359 PHIL. TRANS. R. SOC. LOND. B 1775, 1781 (2004) (predicting that "as more and more facts come in, providing increasingly vivid illustrations of what the human mind is really like, more and more people will develop moral intuitions that are at odds with our current social practices") with Kathleen D. Vohs and Jonathan Schooler, The Value of Believing in Free Will: Encouraging a Belief in Determinism Increases Cheating, 19 PSYCHOLOGICAL SCIENCE 49 (2008) (presenting empirical data to support the claim, as the title suggests, that as people come under the impression that they lack free will, they are more likely to cheat).


[T]he leaders of the founding generation understood that the masses of citizens had to be united together—that there needed to be some level of social cohesion of constitutional government were to succeed. As Gordon Wood observed, ‘In building . . . an integrated national state, the Federalist leaders saw their principal political problem as one of adhesion: how to keep people in such a large sprawling republic from flying apart in pursuit of their partial local interests.’


See Posner & Singer, supra note 153.

Rachlinski, supra note 102, at 1165.

"Can you tell me, Socrates, can virtue be taught? Or is it not teachable but the result of practice, or is it neither of these, but men possess it by nature or in some other way?" PLATO, Meno, in FIVE DIALOGUES 59 (G.M.A. Grube and John M. Cooper eds. 2002).


A quotation from an anonymous reviewer of this article (May 20, 2010, 13:15 EST) (on file with author).

See Part I.B.2.