

Chapter 10

The Fear of Determinism

THIS CHAPTER IS NOT about the boo-word that is frequently (and inaccurately) hurled at any explanation of a behavioral tendency that mentions evolution or genetics. It is about determinism in its original sense, the concept that is opposed to "free will" in introductory philosophy courses. The fear of determinism in this sense is captured in a limerick:

There was a young man who said: "Damn!
It grieves me to think that I am
Predestined to move
In a circumscribed groove:
In fact, not a bus, but a tram."

In the traditional conception of a ghost in the machine, our bodies are inhabited by a self or a soul that chooses the behavior to be executed by the body. These choices are not compelled by some prior physical event, like one billiard ball smacking into another and sending it into a corner pocket. The idea that our behavior is caused by the physiological activity of a genetically shaped brain would seem to refute the traditional view. It would make our behavior an automatic consequence of molecules in motion and leave no room for an uncaused behavior-chooser.

One fear of determinism is a gaping existential anxiety: that deep down we are not in control of our own choices. All our brooding and agonizing over the right thing to do is pointless, it would seem, because everything has already been preordained by the state of our brains. If you suffer from this anxiety, I suggest the following experiment. For the next few days, don't bother deliberating over your actions. It's a waste of time, after all; they have already been determined. Shoot from the hip, live for the moment, and if it feels good do it. No, I am not seriously suggesting that you try this! But a moment's reflection on what would happen if you *did* try to give up making decisions should serve

as a Valium for the existential anxiety. The experience of choosing is not a fiction, regardless of how the brain works. It is a real neural process, with the obvious function of selecting behavior according to its foreseeable consequences. It responds to information from the senses, including the exhortations of other people. You cannot step outside it or let it go on without you because it is you. If the most ironclad form of determinism is real, you could not do anything about it anyway, because your anxiety about determinism, and how you would deal with it, would also be determined. It is the existential fear of determinism that is the real waste of time.

A more practical fear of determinism is captured in a saying by A. A. Milne: "No doubt Jack the Ripper excused himself on the grounds that it was human nature." The fear is that an understanding of human nature seems to eat away at the notion of personal responsibility. In the traditional view, the self or soul, having chosen what to do, takes responsibility when things turn out badly. As with the desk of Harry Truman, the buck stops here. But when we attribute an action to a person's brain, genes, or evolutionary history, it seems that we no longer hold the individual accountable. Biology becomes the perfect alibi, the get-out-of-jail-free card, the ultimate doctor's excuse note. As we have seen, this accusation has been made by the religious and cultural right, who want to preserve the soul, and the academic left, who want to preserve a "we" who can construct our own futures though in circumstances not of our own choosing.

Why is the notion of free will so closely tied to the notion of responsibility, and why is biology thought to threaten both? Here is the logic. We blame people for an evil act or bad decision only when they intended the consequences and could have chosen otherwise. We don't convict a hunter who shoots a friend he has mistaken for a deer, or the chauffeur who drove John F. Kennedy into the line of fire, because they could not foresee and did not intend the outcome of their actions. We show mercy to the victim of torture who betrays a comrade, to a delirious patient who lashes out at a nurse, or to a madman who strikes someone he believes to be a ferocious animal, because we feel they are not in command of their faculties. We don't put a small child on trial if he causes a death, nor do we try an animal or an inanimate object, because we believe them to be constitutionally incapable of making an informed choice.

A biology of human nature would seem to admit more and more people into the ranks of the blameless. A murderer may not literally be a raving lunatic, but our newfangled tools might pick up a shrunken amygdala or a hypometabolism in his frontal lobes or a defective gene for monoamine oxidase A, which renders him just as out of control. Or perhaps a test from the cognitive psychology lab will show that he has chronically limited foresight, rendering him oblivious to consequences, or that he has a defective theory of mind, making him incapable of appreciating the suffering of others. After all, if there is no ghost in the machine, *something* in the criminal's hardware must set him

apart from the majority of people, those who would not hurt or kill in the same circumstances. Pretty soon we will find that something, and, it is feared, murderers will be excused from criminal punishment as surely as we now excuse madmen and small children.

Even worse, biology may show that we are *all* blameless. Evolutionary theory says that the ultimate rationale for our motives is that they perpetuated our ancestors' genes in the environment in which we evolved. Since none of us are aware of that rationale, none of us can be blamed for pursuing it, any more than we blame the mental patient who thinks he is subduing a mad dog but really is attacking a nurse. We scratch our heads when we learn of ancient customs that punished the soulless: the Hebrew rule of stoning an ox to death if it killed a man, the Athenian practice of putting an ax on trial if it injured a man (and hurling it over the city wall if found guilty), a medieval French case in which a sow was sentenced to be mangled for having mauled a child, and the whipping and burial of a church bell in 1685 for having assisted French heretics.¹ But evolutionary biologists insist we are not fundamentally different from animals, and molecular geneticists and neuroscientists insist we are not fundamentally different from inanimate matter. If people are soulless, why is it not just as silly to punish people? Shouldn't we heed the creationists, who say that if you teach children they are animals they will behave like animals? Should we go even farther than the National Rifle Association bumper sticker—GUNS DON'T KILL; PEOPLE KILL—and say that not even people kill, because people are just as mechanical as guns?

These concerns are by no means academic. Cognitive neuroscientists are sometimes approached by criminal defense lawyers hoping that a wayward pixel on a brain scan might exonerate their client (a scenario that is wittily played out in Richard Dooling's novel *Brain Storm*). When a team of geneticists found a rare gene that predisposed the men in one family to violent outbursts, a lawyer for an unrelated murder defendant argued that his client might have such a gene too. If so, the lawyer argued, "his actions may not have been a product of total free will."² When Randy Thornhill and Craig Palmer argued that rape is a consequence of male reproductive strategies, another lawyer contemplated using their theory to defend rape suspects.³ (Insert your favorite lawyer joke here.) Biologically sophisticated legal scholars, such as Owen Jones, have argued that a "rape gene" defense would almost certainly fail, but the general threat remains that biological explanations will be used to exonerate wrongdoers.⁴ Is this the bright future promised by the sciences of human nature—it wasn't me, it was my amygdala? Darwin made me do it? The genes ate my homework?

PEOPLE HOPING THAT AN UNCAUSED SOUL MIGHT RESCUE PERSONAL RESPONSIBILITY ARE IN FOR A DISAPPOINTMENT. In *Elbow Room: The Varieties of Free Will Worth*

Wanting, the philosopher Dan Dennett points out that the last thing we want in a soul is freedom to do anything it desires.⁵ If behavior were chosen by an utterly free will, then we *really* couldn't hold people responsible for their actions. That entity would not be deterred by the threat of punishment, or be ashamed by the prospect of opprobrium, or even feel the twinge of guilt that might inhibit a sinful temptation in the future, because it could always choose to defy those causes of behavior. We could not hope to reduce evil acts by enacting moral and legal codes, because a free agent, floating in a different plane from the arrows of cause and effect, would be unaffected by the codes. Morality and law would be pointless. We could punish a wrongdoer, but it would be sheer spite, because it could have no predictable effect on the future behavior of the wrongdoer or of other people aware of the punishment.

On the other hand, if the soul is predictably affected by the prospect of esteem and shame or reward and punishment, it is no longer truly free, because it is compelled (at least probabilistically) to respect those contingencies. Whatever converts standards of responsibility into changes in the likelihood of behavior—such as the rule "If the community would think you're a boorish cad for doing X, don't do X"—can be programmed into an algorithm and implemented in neural hardware. The soul is superfluous.

Defensive scientists sometimes try to deflect the charge of determinism by pointing out that behavior is never perfectly predictable but always probabilistic, even in the dreams of the hardest-headed materialists. (In the heyday of Skinner's behaviorism, his students formulated the Harvard Law of Animal Behavior: "Under controlled experimental conditions of temperature, time, lighting, feeding, and training, the organism will behave as it damned well pleases.") Even identical twins reared together, who share all of their genes and most of their environment, are not identical in personality and behavior, just highly similar. Perhaps the brain amplifies random events at the molecular or quantum level. Perhaps brains are nonlinear dynamical systems subject to unpredictable chaos. Or perhaps the intertwined influences of genes and environment are so complicated that no mortal will ever trace them out with enough precision to predict behavior exactly.

The less-than-perfect predictability of behavior certainly gives the lie to the cliché that the sciences of human nature are "deterministic" in the mathematical sense. But it doesn't succeed in allaying the fear that science is eroding the concept of free will and personal responsibility. It is cold comfort to be told that a man's genes (or his brain or his evolutionary history) made him 99 percent likely to kill his landlady as opposed to 100 percent. Sure, the behavior was not strictly preordained, but why should the 1 percent chance of his having done otherwise suddenly make the guy "responsible"? In fact, there is *no* probability value that, by itself, ushers responsibility back in. One can always think that there is a 50 percent chance some molecules in Raskolnikov's brain

went thisaway, compelling him to commit the murder, and a 50 percent chance they went thataway, compelling him not to. We still have nothing like free will, and no concept of responsibility that promises to reduce harmful acts. Philosophers call it Hume's Fork: "Either our actions are determined, in which case we are not responsible for them, or they are the result of random events, in which case we are not responsible for them."

PEOPLE WHO HOPE that a ban on biological explanations might restore personal responsibility are in for the biggest disappointment of all. The most risible pretexts for bad behavior in recent decades have come not from biological determinism but from *environmental* determinism: the abuse excuse, the Twinkie defense, black rage, pornography poisoning, societal sickness, media violence, rock lyrics, and different cultural mores (recently used by one lawyer to defend a Gypsy con artist and by another to defend a Canadian Indian woman who murdered her boyfriend).⁶ Just in the week I wrote this paragraph, two new examples appeared in the newspapers. One is from a clinical psychologist who "seeks out a dialogue" with repeat murderers to help them win mitigation, clemency, or an appeal. It manages to pack the Blank Slate, the Noble Savage, the moralistic fallacy, and environmental determinism into a single passage:

Most people don't commit horrendous crimes without profoundly damaging things happening to them. It isn't that monsters are being born right and left. It's that children are being born right and left and are being subjected to horrible things. As a consequence, they end up doing horrible things. And I would much rather live in that world than in a world where monsters are just born.⁷

The other is about a social work student in Manhattan:

Tiffany F. Goldberg, a 25-year-old from Madison, Wis., was struck on the head with a chunk of concrete by a stranger this month. Afterward, she expressed concern for her attacker, speculating that he must have had a troubled childhood.

Graduate students in social work at Columbia called Ms. Goldberg's attitude consistent with their outlook on violence. "Society is into blaming individuals," said Kristen Miller, 27, one of the students. "Violence is intergenerationally transmitted."⁸

Evolutionary psychologists are commonly chided for "excusing" men's promiscuity with the theory that a wandering eye in our ancestors was rewarded with a greater number of descendants. They can take heart from a re-

cent biography that said Bruce Springsteen's "self-doubts made him frequently seek out the sympathy of groupies,"⁹ a book review that said Woody Allen's sexual indiscretions "originated in trauma" and an "abusive" relationship with his mother,¹⁰ and Hillary Clinton's explanation of her husband's libido in her infamous interview in *Talk*:

He was so young, barely 4, when he was scarred by abuse that he can't even take it out and look at it. There was terrible conflict between his mother and grandmother. A psychologist once told me that for a boy being in the middle of a conflict between two women is the worst possible situation. There is always the desire to please each one.¹¹

Mrs. Clinton was raked by the pundits for trying to excuse her husband's sexual escapades, though she said not a word about brains, genes, or evolution. The logic of the condemnation seems to be: If someone tries to explain an act as an effect of some cause, the explainer is saying that the act was not freely chosen and that the actor cannot be held responsible.

Environmental determinism is so common that a genre of satire has grown around it. In a *New Yorker* cartoon, a woman on a witness stand says, "True, my husband beat me because of his childhood; but I murdered him because of mine." In the comic strip *Non Sequitur*, the directory of a mental health clinic reads: "1st Floor: Mother's Fault. 2nd Floor: Father's Fault. 3rd Floor: Society's Fault." And who can forget the Jets in *West Side Story*, who imagined explaining to the local police sergeant, "We're depraved on accounta we're deprived?"

Dear kindly Sergeant Krupke,
You gotta understand,
It's just our bringin' up-ke,
That gets us out of hand.
Our mothers all are junkies,
Our fathers all are drunks.
Golly Moses, natcherly we're punks!

SOMETHING HAS GONE terribly wrong. It is a confusion of *explanation* with *exculpation*. Contrary to what is implied by critics of biological and environmental theories of the causes of behavior, to explain behavior is not to exonerate the behavior. Hillary Clinton may have advanced the dumbest explanation in the history of psychobabble, but she does not deserve the charge of trying to excuse the president's behavior. (A *New York Times* story described Mr. Clinton's response to people's criticism of his wife: "I have not made any excuses for what was inexcusable, and neither has she, believe me," he said, arching his eyebrows for emphasis.)¹² If behavior is not utterly random, it will have some

explanation; if behavior *were* utterly random, we couldn't hold the person responsible in any case. So if we *ever* hold people responsible for their behavior, it will have to be in spite of any causal explanation we feel is warranted, whether it invokes genes, brains, evolution, media images, self-doubt, bringing up-ke, or being raised by bickering women. The difference between *explaining* behavior and *excusing* it is captured in the saying "To understand is not to forgive," and has been stressed in different ways by many philosophers, including Hume, Kant, and Sartre.¹³ Most philosophers believe that unless a person was literally coerced (that is, someone held a gun to his head), we should consider his actions to have been freely chosen, even if they were caused by events inside his skull.

But *how* can we have both explanation, with its requirement of lawful causation, and responsibility, with its requirement of free choice? To have them both we don't need to resolve the ancient and perhaps unresolvable antinomy between free will and determinism. We only have to think clearly about what we want the notion of responsibility to achieve. Whatever may be its inherent abstract worth, responsibility has an eminently practical function: deterring harmful behavior. When we say that we hold someone responsible for a wrongful act, we expect him to punish himself—by compensating the victim, acquiescing to humiliation, incurring penalties, or expressing credible remorse—and we reserve the right to punish him ourselves. Unless a person is willing to suffer some unpleasant (and hence deterring) consequence, claims of responsibility are hollow. Richard Nixon was ridiculed when he bowed to pressure and finally "took responsibility" for the Watergate burglary but did not accept any costs such as apologizing, resigning, or firing his aides.

One reason to hold someone responsible is to deter the person from committing similar acts in the future. But that cannot be the whole story, because it is different only in degree from the contingencies of punishment used by behaviorists to modify the behavior of animals. In a social, language-using, reasoning organism, the policy can also deter similar acts by *other* organisms who learn of the contingencies and control their behavior so as not to incur the penalties. That is the ultimate reason we feel compelled to punish elderly Nazi war criminals, even though there is little danger that they would perpetrate another holocaust if we let them die in their beds in Bolivia. By holding them responsible—that is, by publicly enforcing a policy of rooting out and punishing evil wherever and whenever it occurs—we hope to deter others from committing comparable evils in the future.

This is not to say that the concept of responsibility is a recommendation by policy wonks for preventing the largest number of harmful acts at the least cost. Even if experts had determined that punishing a Nazi would prevent no future atrocities, or that we could save more lives by diverting the manpower to catching drunk drivers, we would still want to bring Nazis to justice. The de-

mand for responsibility can come from a burning sense of just deserts, not only from literal calculations of how best to deter particular acts.

But punishment even in the pure sense of just deserts is *ultimately* a policy for deterrence. It follows from a paradox inherent to the logic of deterrence: though the *threat* of punishment can deter behavior, if the behavior does take place the punishment serves no purpose other than pure sadism or an illogical desire to make the threat credible retroactively. "It won't bring the victim back," say the opponents of capital punishment, but that can be said about *any* form of punishment. If we start the movie at the point at which a punishment is to be carried out, it looks like spite, because it is costly to the punisher and inflicts harm on the punishee without doing anyone any immediate good. In the middle decades of the twentieth century, the paradox of punishment and the rise of psychology and psychiatry led some intellectuals to argue that criminal punishment is a holdover from barbaric times and should be replaced by therapy and rehabilitation. The position was clear in the titles of books like George Bernard Shaw's *The Crime of Imprisonment* and the psychiatrist Karl Menninger's *The Crime of Punishment*. It was also articulated by leading jurists such as William O. Douglas, William Brennan, Earl Warren, and David Bazelon. These radical Krupkeists did not suffer from a fear of determinism; they welcomed it with open arms.

Few people today argue that criminal punishment is obsolete, even if they recognize that (other than incapacitating some habitual criminals) it is pointless in the short run. That is because if we ever did calculate the short-term effects in deciding whether to punish, potential wrongdoers could *anticipate* that calculation and factor it into their behavior. They could predict that we would not find it worthwhile to punish them once it was too late to prevent the crime, and could act with impunity, calling our bluff. The only solution is to adopt a resolute policy of punishing wrongdoers *regardless* of the immediate effects. If one is genuinely not bluffing about the threat of punishment, there is no bluff to call. As Oliver Wendell Holmes explained, "If I were having a philosophical talk with a man I was going to have hanged (or electrocuted) I should say, 'I don't doubt that your act was inevitable for you but to make it more avoidable by others we propose to sacrifice you to the common good. You may regard yourself as a soldier dying for your country if you like. But the law must keep its promises.'"¹⁴ This promise-keeping underlies the policy of applying justice "as a matter of principle," regardless of the immediate costs or even of consistency with common sense. If a death-row inmate attempts suicide, we speed him to the emergency ward, struggle to resuscitate him, give him the best modern medicine to help him recuperate, and kill him. We do it as part of a policy that closes off all possibilities to "cheat justice."

Capital punishment is a vivid illustration of the paradoxical logic of deterrence, but the logic applies to lesser criminal punishments, to personal acts

of revenge, and to intangible social penalties like ostracism and scorn. Evolutionary psychologists and game theorists have argued that the deterrence paradox led to the evolution of the emotions that undergird a desire for justice: the implacable need for retribution, the burning feeling that an evil act knocks the universe out of balance and can be canceled only by a commensurate punishment. People who are emotionally driven to retaliate against those who cross them, even at a cost to themselves, are more credible adversaries and less likely to be exploited.¹⁵ Many judicial theorists argue that criminal law is simply a controlled implementation of the human desire for retribution, designed to keep it from escalating into cycles of vendetta. The Victorian jurist James Stephen said that "the criminal law bears the same relation to the urge for revenge as marriage does to the sexual urge."¹⁶

Religious conceptions of sin and responsibility simply extend this lever by implying that any wrongdoing that is undiscovered or unpunished by one's fellows will be discovered and punished by God. Martin Daly and Margo Wilson sum up the ultimate rationale of our intuitions about responsibility and godly retribution:

From the perspective of evolutionary psychology, this almost mystical and seemingly irreducible sort of moral imperative is the output of a mental mechanism with a straightforward adaptive function: to reckon justice and administer punishment by a calculus which ensures that violators reap no advantage from their misdeeds. The enormous volume of mystico-religious baffle-gab about atonement and penance and divine justice and the like is the attribution to higher, detached authority of what is actually a mundane, pragmatic matter: discouraging self-interested competitive acts by reducing their profitability to nil.¹⁷

THE DETERRENCE PARADOX also underlies the part of the logic of responsibility that makes us expand or contract it when we learn about a person's mental state. Modern societies do not just pick whatever policy is most effective at deterring wrongdoers. For example, if one's only value was to reduce crime, one could always make the punishments for it especially cruel, as most societies did until recently. One could convict people on the basis of an accusation, a guilty manner, or a forced confession. One could execute the entire family of a criminal, or his entire clan or village. One could say to one's adversaries, as Vito Corleone said to the heads of the other crime families in *The Godfather*, "I'm a superstitious man. And if some unlucky accident should befall my son, if my son is struck by a bolt of lightning, I will blame some of the people here."

The reason these practices strike us as barbaric is that they inflict more harm than is necessary to deter evil in the future. As the political writer Harold

Laski said, "Civilization means, above all, an unwillingness to inflict unnecessary pain." The problem with broad-spectrum deterrents is that they catch innocent people in their nets, people who could not have been deterred from committing an undesirable act to start with (such as the kin of the man who pulled the trigger, or a bystander during a lightning storm that kills the Godfather's son). Since punishment of these innocents could not possibly deter other people like them, the harm has no compensating benefit even in the long run, and we consider it unjustified. We seek to fine-tune our policy of punishment so that it applies only to people who *could have been* deterred by it. They are the ones we "hold responsible," the ones we feel "deserve" the punishment.

A fine-tuned deterrence policy explains why we exempt certain harm-causers from punishment. We don't punish those who were unaware that their acts would lead to harm, because such a policy would do nothing to prevent similar acts by them or by others in the future. (Chauffeurs cannot be deterred from driving a president into the line of fire if they have no way of knowing there will be a line of fire.) We don't apply criminal punishment to the delirious, the insane, small children, animals, or inanimate objects, because we judge that they—and entities similar to them—lack the cognitive apparatus that could be informed of the policy and could inhibit behavior accordingly. We exempt these entities from responsibility not because they follow predictable laws of biology while everyone else follows mysterious not-laws of free will. We exempt them because, unlike most adults, they lack a functioning brain system that can respond to public contingencies of punishment.

And this explains why the usual exemptions from responsibility should *not* be granted to all males or all abuse victims or all of humanity, even when we think we can explain what led them to act as they did. The explanations may help us understand the parts of the brain that made a behavior tempting, but they say nothing about the *other* parts of the brain (primarily in the prefrontal cortex) that could have inhibited the behavior by anticipating how the community would respond to it. We are that community, and our major lever of influence consists in appealing to that inhibitory brain system. Why should we discard our lever on the system for inhibition just because we are coming to understand the system for temptation? If you believe we shouldn't, that is enough to hold people responsible for their actions—without appealing to a will, a soul, a self, or any other ghost in the machine.

This argument parallels a long-running debate about the most blatant example of a psychological explanation that nullifies responsibility, the insanity defense.¹⁸ Many legal systems in the English-speaking world follow the nineteenth-century M'Naughten rule:

... the jurors ought to be told in all cases that every man is to be presumed to be sane, and to possess a sufficient degree of reason to be

responsible for his crimes, until the contrary be proved to their satisfaction; and that, to establish a defense on the ground of insanity, it must be clearly proved that, at the time of the committing of the act, the party accused was laboring under such a defect of reason, from disease of the mind, as not to know the nature and quality of the act he was doing, or, if he did know it, that he did not know he was doing what was wrong.

This is an excellent characterization of a person who cannot be deterred. If someone is too addled to know that an act would harm someone, he cannot be inhibited by the injunction "Don't harm people, or else!" The M'Naughten rule aims to forgo spiteful punishment—retribution that harms the perpetrator with no hope of deterring him or people similar to him.

The insanity defense achieved its present notoriety, with dueling rent-a-shrinks and ingenious abuse excuses, when it was expanded from a practical test of whether the cognitive system responding to deterrence is working to the more nebulous tests of what can be said to have produced the behavior. In the 1954 *Durham* decision, Bazelon invoked "the science of psychiatry" and "the science of psychology" to create a new basis for the insanity defense:

The rule we now hold is simply that an accused is not criminally responsible if his unlawful act was the product of mental disease or mental defect.

Unless one believes that ordinary acts are chosen by a ghost in the machine, *all* acts are products of cognitive and emotional systems in the brain. Criminal acts are relatively rare—if everyone in a defendant's shoes acted as he did, the law against what he did would be repealed—so heinous acts will often be products of a brain system that is in *some* way different from the norm, and the behavior can be construed as "a product of mental disease or mental defect." The *Durham* decision and similar insanity rules, by distinguishing behavior that is a product of a brain condition from behavior that is something else, threatens to turn every advance in our understanding of the mind into an erosion of responsibility.

Now, some discoveries about the mind and brain really could have an impact on our attitudes toward responsibility—but they may call for expanding the domain of responsibility, not contracting it. Suppose desires that sometimes culminate in the harassment and battering of women are present in many men. Does that really mean that men should be punished more leniently for such crimes, because they can't help it? Or does it mean they should be punished more surely and severely, because that is the best way to counteract a strong or widespread urge? Suppose a vicious psychopath is found to have a defective sense of sympathy, which makes it harder for him to appreciate the

suffering of his victims. Should we mitigate the punishment because he has diminished capacity? Or should we make the punishment more sure and severe to teach him a lesson in the only language he understands?

Why do people's intuitions go in opposite directions—both "If he has trouble controlling himself, he should be punished more leniently" and "If he has trouble controlling himself, he should be punished more severely"? It goes back to the deterrence paradox. Suppose some people need a threat of one lash with a wet noodle to deter them from parking in front of a fire hydrant. Suppose people with a bad gene, a bad brain, or a bad childhood need the threat of ten lashes. A policy that punishes illegal parkers with nine lashes will cause unnecessary suffering and not solve the problem: nine lashes is more than necessary to deter ordinary people and less than necessary to deter defective people. Only a penalty of ten lashes can reduce both illegal parking and lashing; everyone will be deterred, no one will block hydrants, and no one will get whipped. So, paradoxically, the two extreme policies (harsh punishment and no punishment) are defensible and the intermediate ones are not. Of course, people's deterrence thresholds in real life aren't pinned at just two values but are broadly distributed (one lash for some people, two for others, and so on), so many intermediate levels of punishment will be defensible, depending on how one weights the benefits of deterring wrongdoing against the costs of inflicting harm.

Even for those who are *completely* undeterrable, because of frontal-lobe damage, genes for psychopathy, or any other putative cause, we do not have to allow lawyers to loose them on the rest of us. We already have a mechanism for those likely to harm themselves or others but who do not respond to the carrots and sticks of the criminal justice system: involuntary civil commitment, in which we trade off some guarantees of civil liberties against the security of being protected from likely predators. In all these decisions, the sciences of human nature can help estimate the distribution of deterrabilities, but they cannot weight the conflicting values of avoiding the greatest amount of unnecessary punishment and preventing the greatest amount of future wrongdoing.¹⁹

I do not claim to have solved the problem of free will, only to have shown that we don't need to solve it to preserve personal responsibility in the face of an increasing understanding of the causes of behavior. Nor do I argue that deterrence is the only way to encourage virtue, just that we should recognize it as the active ingredient that makes responsibility worth keeping. Most of all, I hope I have dispelled two fallacies that have allowed the sciences of human nature to sow unnecessary fear. The first fallacy is that biological explanations corrode responsibility in a way that environmental explanations do not. The second fallacy is that causal explanations (both biological and environmental) corrode responsibility in a way that a belief in an uncaused will or soul does not.

THE BLANK SLATE



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VIKING

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