

# Chapter 13

## Corporations

Everything we discussed in the previous chapter applies to corporations, and some of the examples we used in the previous chapter were corporations. But because they are actors in so many societal dilemmas—they're legal persons in some countries—they warrant separate discussion. But before examining how societal dilemmas affect corporations, we need first to understand the basic supply-and-demand mechanics of a market economy as a pair of societal dilemmas.

Suppose a local market has a group of sandwich merchants, each of whom needs to set a sale price for its sandwiches. A sandwich costs \$4 to make, and the minimum price a merchant can sell them at and stay in business is \$5. At a price of \$6 per sandwich, consumers will buy 100 of them—sales equally divided amongst the merchants. At a sale price of \$5 per sandwich, consumers will buy 150—again, equally divided. If one merchant's prices are lower than the others', the undercutter will get all the business.

The merchants face a societal dilemma, an Arms Race akin to the advertise-or-not example in Chapter 5. It's in their collective group interest for prices to remain high; they collectively make a greater profit if they all charge \$6 for a sandwich. But by keeping their prices high, each of them runs the risk of their competitors acting in their self-interest and undercutting them. And since they can't trust the others not to do that, they all preemptively lower their prices and all end up selling sandwiches at \$5 each. In economics this is known as the "race to the bottom."

<b>Societal Dilemma: Setting prices.</b>	
<b>Society: All the merchants.</b>	
Group interest: Make the most money as a group.	Competing interest: Make the most money individually, and in the short term.
Group norm: Keep prices high.	Corresponding defection: Undercut the competition.
To encourage people to act in the group interest, the society implements a variety of societal pressures.	
Moral: The group encourages loyalty.	
Reputational: The group reacts negatively to those who break the cartel.	
Institutional: Various price-fixing schemes.	
Security: Internet price-comparison sites.	

This societal dilemma is in continuous force. Day after day, month after month, the merchants are under constant temptation to defect and lower their prices, not just down to \$5, but even lower, if possible. The end result is that all of them end up selling sandwiches as cheaply as they possibly can, to the benefit of all the customers.

It's obvious how to solve this: the merchants need to trust each other. Like the mall stores at the beginning of Chapter 9, they can collectively agree to sell sandwiches at a minimum price of \$6 because they know it benefits them as a group. This practice was common throughout history. The medieval guild system was a way for sellers to coerce each other into keeping prices high; it was illegal to engage in trade except through the guild, and the system was enforced by the king. Cartels are a more modern form of this; oligopolies are another. Another way is to convince the government to pass a law outlawing cheaper sandwiches. Whatever name you use, the [result is price-fixing](#).

Merchants like doing this, because keeping prices high is profitable. As [Adam Smith](#) said, "People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices."

Price-fixing has had varying degrees of success throughout history.<sup>1</sup> Sometimes it lasts for a long time. De Beers has successfully controlled the diamond market and kept prices artificially high since the 1880s. And sometimes it collapses quickly—the [global citric acid cartel](#) lasted only four years and the DRAM [computer-memory cartel](#) just three. Sometimes buyers, such as Gateway and Dell in the DRAM price-fixing case, have a hand in breaking cartels, but it's usually government. Similarly, it's usually government that helps support them. Smuggling and other commerce often take place outside the cartel, but the cartel still works as long as they're kept to a minimum.

That's not good enough for a modern market economy. It is a basic tenet of capitalism that competition—sellers competing for buyers—rather than cartels are what should set prices. Capitalist society wants universal defection amongst sellers, because we recognize that a constant downward pressure on prices benefits the economy as a whole.

What we realize is that there's another societal dilemma functioning simultaneously and competing with the first.

<b>Societal Dilemma: Setting prices.</b>
<b>Society: Society as a whole.</b>

Group interest: Competition.	Competing interest: Make the most money as a group.
Group norm: Do not collude in setting prices.	Competing norm: Keep prices high.
To encourage people to act in the group interest, the society implements a variety of societal pressures. Moral: The belief that price-fixing is wrong and that competition is good. Reputational: Being known as the merchant with the lowest price gives you an advantage, and being known as a price-fixer makes you look sleazy. Institutional: Anti-trust laws. Security: Various price-comparison websites.	

Each merchant is in a societal dilemma with all of the other sandwich sellers; they're also in a larger societal dilemma with all the rest of society, including all the other sandwich sellers. Cooperating in one means defecting in the other, and in a modern market economy, the latter dilemma takes precedence.<sup>2</sup>

This works to the buyer's advantage, although more in theory than in practice. The previous societal dilemma pushes prices down only when there are more salable goods than there are buyers, and sellers are competing for buyers.

In some cases, the buyers can get stuck in a societal dilemma as well, pushing prices up. This is the other half of a market economy: buyers competing with each other. Imagine that a sandwich seller has twenty sandwiches left, and there are forty people who want to buy one—including customer Bob. The normal price for the sandwich is \$5, but the seller has raised his price to \$6.

Here's the new societal dilemma. Bob is actually willing to pay \$6 for the sandwich, but he'd rather get it for \$5. So would everyone else. If everyone cooperated and refused to pay \$6 for a sandwich, the seller would eventually be forced to lower his prices. But there's always the incentive to defect—and be sure of getting a sandwich—rather than cooperate so that everyone who gets a sandwich pays only \$5.

<b>Societal Dilemma: Competing on to-buy prices.</b>	
<b>Society: All the customers.</b>	
Group interest: Keep prices low.	Competing interest: Getting the item you want.
Group norm: Don't bid up the price of items.	Corresponding defection: Differing to pay more for an item.
To encourage people to act in the group interest, the society implements a variety of societal pressures. Moral: It's unfair to bid up merchandise. Reputational: There are negative reputational consequences for bidding up merchandise and for overpaying. Institutional: None. Security: None.	

Of course, this kind of thing never happens at sandwich shops. But it regularly happens in real estate markets, when buyers bid amounts higher than the asking price in order to out-compete other buyers for properties. It also happens with popular concerts and sporting events, where scalpers create a secondary market with higher prices as more buyers compete for a limited number of seats.

Auctions are fueled by this societal dilemma. As long as there are more bidders who want an item than there are items, they'll compete with each other to push prices as high as possible. And auctions implement societal pressures to prevent buyer collusion. For example, eBay makes it difficult for buyers to contact each other and collude.

A similar mechanism occurs with clothing in department stores. All department stores eventually mark down their seasonal inventory to get rid of it. Selling it cheap, or even at a loss, is better than keeping it on the shelves or in a storeroom somewhere. If Alice finds something she wants to buy early in the season, she is faced with a societal dilemma. If she cooperates with everyone else and refuses to buy the clothing at full price, eventually the entire inventory will be discounted—drastically. But she risks others defecting and buying the garments at full price, and there not being any left of what she wants at the end of the season for the store to discount. Some discount retailers such as [Outnet.com](http://Outnet.com) explicitly make use of this societal dilemma in their sales techniques. A garment starts out at full price, and is discounted more each week, until it reaches a final—very large—discount. Shoppers are truly faced with a societal dilemma: buy now at the higher price, or wait for a lower price and potentially lose the garment to someone else.<sup>3</sup> Many antique shops and consignment stores use this strategy, too. As long as multiple buyers want the same item, it works.<sup>4</sup>

On the other hand, traditional buying clubs allow buyers to cooperate and push prices down. In addition to minimizing distribution and presentation costs, Costco and Sam's Club negotiate lower prices on behalf of their members.

Both of these pairs of societal dilemmas assume that, within each subgroup, buyers, sellers, and sandwiches are interchangeable. But of course that's not the case. Humans are a species of innovators, and we're always looking for ways to sell more profitable sandwiches and buy cheaper ones. The seller has two basic options:

- Merchant Alice can sell a cheaper sandwich. If Merchant Alice can substitute cheaper ingredients or use a cheaper sandwich-making process, she can either sell her sandwiches more cheaply than the competition or sell them at the same price with a greater profit margin—both options making her more money. It might not work. If the customers notice that Alice's sandwiches are of poorer quality than Bob's, they'll value them less. But if the customers don't notice that the sandwiches are any worse, then Alice deserves the increased business. She's figured out a way to make sandwiches cheaper in a way that

makes no difference to the customer.<sup>5</sup>

- Merchant Alice can sell a better sandwich. Maybe she finds more expensive but tastier ingredients, or uses a more complicated sandwich-making process. Or she could make the sandwich-buying experience better by serving it with a smile and remembering her regular customers' names. She can either sell that better sandwich at the same price, bringing her more customers and more profit, or she can sell the better sandwiches at a more expensive price—whatever price the customers think those new sandwiches and the premium experience are worth. Of course, this requires that the customers value this better sandwich more. If they do, then Alice also deserves the increased business.

Both of these things happen all the time. Innovation is one of the important things a market economy fuels. On the buyer's side, the ways for customers to innovate are more limited.

Yes, this is all basic supply-and-demand economics; but it's economics from the perspective of societal pressures. You can look at a market economy as two different pairs of competing societal dilemmas: one preventing sellers from colluding, and the other preventing buyers from colluding. On a local scale, moral and reputational pressure largely enforces all of this. As long as buyers know the prices sellers are selling at and the sellers know what buyers are willing to pay—and this is generally true in local public markets—competition works as a price-setting mechanism. And if there are enough sellers, it's hard for them to collude and fix prices; someone is bound to defect and undercut the group. Sellers can try to differentiate their products from each other—either by selling less-desirable variants at a cheaper price or more-desirable variants at a higher price—and buyers will compete against each other to set new prices. The best way to succeed in this marketplace is to offer the best products at the lowest prices: that is, to have the best reputation for quality and price. There need to be enough buyers and sellers to make the market fluid, and enough transparency that the buyers know what they're buying; but if those things are true, then it all works.

It's only when you scale things up that these systems start failing. Societal pressures don't work the same when the sellers are large corporations as they do when they're sole proprietors in a public market. They don't work the same when the products are complicated—like cell phone plans—as they do when the products are simple. They don't work the same when commerce becomes global. They don't work the same when technology allows those corporations to defect at a scope larger than their own net worth.

During the early years of Prohibition, there was an epidemic of paralysis in the American South and Midwest, caused by “Jamaica Ginger,” a popular patent medicine. It was mostly alcohol,<sup>6</sup> but about 500,000 bottles were laced with what turned out to be a nerve poison. It's hard to imagine a reputational pressure system being effective enough to prevent this kind of thing from happening. Sure, the company that sold this product was vilified, but not before tens of thousands of people were affected. (The “United Victims of [Ginger Paralysis Association](#)” had 35,000 members.) And, in fact, [this incident led](#) to the passage of the 1938 Food, Drug, and Cosmetic Act and the establishment of regulations requiring pre-market approval for drugs.

Corporations are organizations. They come in all sizes. The company that made all that Jamaican Ginger consisted of two guys and an office; many corporations employ more than 100,000 people; and Wal-Mart employs over 2,000,000. They have some of the same characteristics as individuals—they try to maximize their trade-offs, they have a self-preservation instinct, etc.—but they are not individuals. In some very important ways, they differ from individuals.

These differences may affect corporations' defection characteristics:

- *They have a single strong self-interest: the profit motive.* The case can be made that it's the only relevant interest a corporation has. A corporation is legally required to [follow its charter](#), which for a non-profit corporation means maximizing shareholder value. Individuals have many more competing motivations.
- *They try to hire people who will maximize their selfish interest.* The people who run corporations, as well as the people promoted within them, tend to be willing to put the corporation's selfish interest (and sometimes their own selfish interest) ahead of any larger group interest. Individuals can't hire arms and feet selected to meet their needs.
- *They can be very large in several dimensions.* They can have a lot of assets, products, sales, stores, and employees. This increases their potential scope of defection: they can defect with greater frequency, and each defection can have greater intensity.
- *They can spread themselves over a large geographical area, so much so that they become unmoored from any physical location.* This reduces the effectiveness of institutional pressure that's tied to physical location: laws. It also reduces moral and reputational pressure against senior executives in those corporations, as they can remain socially isolated from those they harm.
- *They can be complex, especially if they're large.* This creates more internal subgroups at varying scales and intimacies, and the competing interests within them can change what they do. This gives them more options for evading accountability. It can also make it more difficult for people acting locally to determine what the competing interests actually are. Sometimes a single corporation can encompass different business units that compete directly with each other.
- *They can be powerful.* The combination of money and size can make corporations very powerful, both politically and socially. They can influence national and local legislation.<sup>7</sup>
- *Millions of people depend on corporations for their livelihood.* When a major corporation has problems—even if it makes strategic decisions about automating, outsourcing, shutting down or starting up new

product lines, and so on—many people and their families are affected. Whole communities can be affected. This means there are unintended consequences to many societal pressure systems.

- *They can be difficult to punish.* Corporate employees or owners are not the same as the corporation. Also, punishing a corporation can have ripple effects through society, hurting those who were in no way responsible for the corporation's misdoings.
- *They can live forever.* They are not tied to their founders, or to any particular people. They can live far longer than human lifespans.
- *They have more to lose than individuals do.* A damaged reputation can have much larger effects on corporations than on individuals, especially the big ones. This makes them more conservative.

Because of these differences, societal pressures work differently. [Moral pressure is](#) dampened in corporations. We've already seen in Chapter 9 that adding financial incentives tends to trump moral considerations. At the extreme, by telescoping the complexities of human morality into a wholly financial risk trade-off, corporations can largely relieve themselves of moral considerations. We also saw in Chapter 12 that morals are dampened in hierarchical group settings. The research is pretty clear on this point.

The upshot, to paint with a broad brush, is that corporations' risk trade-offs are much more focused on making a financial profit than individuals' are.<sup>8</sup> People are emotionally complicated, and will regularly forgo money in exchange for more subjective benefits. Corporations, because of their group nature, are simpler; they are far more likely to choose the more profitable trade-off. To take a familiar example, it's far easier for a chef/owner of a restaurant to forgo some profit to create the sort of restaurant that gives him the most creative satisfaction, while a corporate-owned restaurant chain will be more concerned about consistency and the bottom line.

Another example is a garment or shoe designer buying goods made in [overseas sweatshops](#) staffed with child labor. An individual might refuse to do that on moral grounds, recognizing that she is going to have to pay more for those goods made elsewhere and deliberately forgo the extra profits. A corporation is more likely to buy the goods, as long as it's legal to do so. And, as we've seen in Chapter 12, the person who is in charge of making this decision will do better personally if he ignores his own moral considerations and cooperates with his employer. Even worse, if the corporation doesn't maximize profits, it risks a shareholder lawsuit.

Additionally, market competition encourages sellers to ignore moral pressure as much as they can. Imagine if you were in a corporate boardroom, discussing the Double Irish tax loophole and how it could save your company millions. After it has been explained how the maneuver is perfectly legal, and how other companies are doing it, how far do you think a "but it's immoral" argument is going to go? Even if you don't want to do it, if you don't and your competitors do, you'll be uncompetitive in the marketplace—reminiscent of the sports doping example from Chapter 10. Morals have nothing to do with it; this is business. Likewise, on a smaller scale, hospitals tend to [replace management](#) teams who don't exploit Medicare billing loopholes, or engage in illegal upcoding, with teams that do.

Even when a corporation engages in seemingly altruistic behavior—investing in the community, engaging in charitable activities, pledging to follow fair labor guidelines, and so on—it is primarily doing so because of the value of increasing its reputation. It's only a bit over the top to call corporations "[immortal sociopaths](#)," as attorney and writer Joel Baken did. For corporations, the closest thing they have to morals is law. The analogy is pretty precise. Morals tell people what's right and what's wrong; the law tells corporations what's right and what's wrong. If corporations behave morally, it's generally because they believe it is [good for their reputation](#), and to a lesser extent because it's good for employee morale. This is less likely to be true with smaller corporations run by individuals or small groups of individuals; there, the corporation is more likely an extension of the person.

Or as [Baron Thurlow](#), a Lord Chancellor of England, put it sometime before 1792: "Corporations have neither bodies to be punished, nor souls to be condemned, they therefore do as they like." In more modern language, John Coffee wrote that corporations have "[no soul to damn](#); no body to kick."<sup>9</sup>

Reputational pressure can also fail against corporations. There's a belief that the market's natural regulation systems are sufficient to provide societal pressure, and that institutional pressure—laws and regulations—are both unnecessary and have harmful side effects. From the perspective of this book, this is just another name for reputational pressure.

Let's take an example: toxins in bottled water. Assume there's no institutional pressures, only reputational. Consumers decide for themselves what sort of toxin levels they are willing to tolerate, and then either buy or don't buy the product. (The assumption here is that removing the toxins costs money, and will result in a more expensive bottle.) Companies that sell toxin-free water enjoy a good reputation. Companies that allow too much toxin in their bottled water face a diminished reputation, and as a result, will reduce those toxins in an attempt to repair their reputation. If this works, it effectively "regulates" the bottled water companies.

We already know how reputational pressures fail when arrayed against an individual, and those failures are even more likely in the case of corporate reputation.

- The corporation will try to manage its reputation. Just as a person tries to accentuate his good qualities and minimize his bad ones, corporations do the same. The difference is that corporations will employ people whose entire job is to do this. Corporate reputation management equals public relations, and corporations spend [a lot of money](#) on advertising—\$130 billion annually in the U.S. alone. The science of advertising has completely changed over the past couple of decades. Today, it's more like [psychological manipulation](#) with a healthy [dose of neuroscience](#).<sup>10</sup> As such, there can be a large difference between a corporation's behavior and what the public thinks is the corporation's behavior. It



can be hard to remember the relative toxicity levels of different bottled water brands when the corporations are all engaged in advertising designed to make you believe you'll be more successful with the opposite sex if you would only drink their product.

- For reputation to work as a societal pressure system, there needs to be transparency. But consumers might not know enough about the relative toxicity levels to have it affect the reputation of the various companies. (They might not know what chemicals are in the water, they might not know at what concentrations those chemicals are toxic, and they might not know the toxic effects of those chemicals.) Corporations can be very private, especially about things that make them look bad. Sure, testing companies like Consumers Union can give consumers information about the various bottled water companies, but there seems to be very little demand for that sort of thing. Salience matters a lot, here. When you want a bottle of water, you're thinking about your thirst—not about independent third-party evaluations of water quality. To give a real example, corporations have successfully fought the labeling of genetically modified foods, so consumers aren't able to decide for themselves whether to eat them.
- Corporations might co-opt the testing and rating process. Those “independent third-party evaluations” aren't always so independent, and without transparency, consumers won't know.
- The damage resulting from the bad behavior might be so severe that no reputational consequences would be enough. Imagine that the bottled water is toxic enough that people start dying. Sure, the company will be out of business. But that seems like an inadequate penalty for killing people. And while this is an extreme story, there are lots of real-world examples of corporate decisions resulting in long-term disease and even death. In 2007 and 2008, at least ten Chinese companies produced contaminated batches of the blood-thinning drug heparin, substituting a cheap synthetic ingredient for a costlier natural one. At least [150 people died](#) as a direct result of the contaminated drug; we may never know how many secondary deaths or related illnesses there were.
- There can be a long time lag between the bad behavior and the reputational consequences. If the toxin in the bottled water is slow-acting, people might not know about its effects for years or even decades. So a corporation could continue selling toxin-laced water for a long time before it suffered any reputational damage. Remember “I'll be gone, you'll be gone”? That's an economically rational self-interest strategy in that instance.
- Consumers might not be able to penalize the company that's making the bottled water. In an open-air market, customers know who their suppliers are. In the complex world of international outsourcing and subcontracting, it can be much harder. In 2011, [Cargill recalled](#) 36 million pounds of ground turkey because of salmonella risk. None of that turkey was sold under the Cargill name, making it difficult for customers to penalize Cargill. In 2005, the data broker [ChoicePoint allowed](#) a criminal group to steal the identifying information of 140,000 consumers. If consumers wanted to penalize the company by not doing business with them anymore, they couldn't—consumers aren't ChoicePoint's customers.
- The profit resulting from the bad behavior might be large enough that it'd be worth the reputational loss. If customers have no choice but to buy the bottled water—maybe there's no competition and the groundwater is even more toxic—then the corporation doesn't have to worry about what customers will think. Less-extreme versions of this scenario happen all the time in the real world; many industries benefit from the difficulty customers have in switching to a competing product.<sup>11</sup>

All this is made worse by the various substitutes people use in place of direct reputation when it comes to brands. [There's recognition](#): people buy what is familiar to them. [There's social proof](#): people buy what others buy. There's even something called [attribute substitution](#): people buy the red bottle because they like the color red and don't have any other way of choosing. These are some of the reasons consumers can be manipulated so easily.

Reputation relies on transparency to work, but for many modern products, the seller knows a lot more than the buyer. There's a general economic theory about this, called [a lemons market](#). Both experiment and observation demonstrate that in a lemons market, bad products drive out good products. That is, if one company is selling cheap toxic water—or cheap unhealthy sandwiches—and the buyer doesn't know the difference between the good products and the cheap ones, he'll buy the cheap ones, and competitors will be pressured to make their products equally cheap and equally bad.

What we know about reputational pressures is that they work best in small groups where there are strong social ties among the individuals. A sandwich seller in a local public market probably doesn't need a whole lot of institutional pressure. He's part of a community, and if his sandwiches start making people sick fast enough that they notice the connection, no one will buy them anymore. But just as this sort of security system doesn't scale for individuals as the community gets larger, social ties weaken, and the value of the items being bought and sold increases, it doesn't scale for corporations, either. [Globalization is making](#) the effects of reputational pressure weaker. As a result, the effects of defection are greater. Three examples:

- In 2011, the pharmaceutical giant [Glaxo Smith-Kline](#) was fined \$750 million for marketing drugs manufactured in a Puerto Rican plant whose managers ignored numerous FDA letters warning that products were likely contaminated.
- Hundreds of people in Haiti, Panama, and Nigeria [died of kidney failure](#) in the 1990s and 2000s after consuming medicinal syrups manufactured with toxic diethylene glycol—an industrial chemical used to make plastics. Economically minded manufacturers had secretly substituted the toxic chemical for the more expensive, but nontoxic, glycerin.
- Starting in the mid-1990s, the Ford Motor Company knew that its Explorer model was [prone to rollover](#),

but didn't do anything to fix the problem until 2002. Until they did, there were 185 deaths and 700 injuries resulting from the problem.

Just as moral and reputational pressures can fail against corporations, so can institutional pressures. We've discussed some of the ways they fail against individuals in Chapter 9: interpretation, loopholes, lack of enforcement. These failures can be more severe in corporations, because corporations can afford more and better lawyers to figure out how to evade laws. And law enforcement is much more consumer-friendly when it comes to dealing with individual defectors. If someone steals your wallet, you know how to call the police. If a corporation breaks the law, whom do you call?

Fines can be an effective institutional penalty, but can fail if they're too small. The DeCoster family egg farms, responsible for the huge [salmonella outbreak](#) in 2010, had been repeatedly fined for health violations for over ten years. In 2011, the large pharmaceutical company Merck Serono agreed to pay a \$44.5 million fine for illegally marketing [the drug Rebif](#). That sounds like a lot, until you realize that the annual sales of the drug were \$2.5 billion and the misconduct occurred over an eight-year period. It's no wonder the firm was a repeat offender; the fines were just a cost of doing business. Another example: the penalties for [using child labor](#) are so small in some countries—\$59 to \$147 in Egypt, \$470 in India, \$70 in Kenya, \$47 to \$470 in Nicaragua, \$25 to \$253 in the Philippines—that it makes financial sense for Western companies to defect. In Chapter 11, I mentioned the fake anti-virus industry. One company largely ignored the Federal Trade Commission prosecution because it was making more money than the fine was likely to be.<sup>12</sup>

We discussed other societal pressure failures inside corporations in the previous chapter: employees of a corporation defecting from that corporation, employee loyalty that encourages cooperation with the corporation and defection from society as a whole, and employees defecting from a corporation to benefit that corporation. Additionally, two of the differences between corporations and people listed above—that millions of people depend on them for their livelihood and that punishing them can have ripple effects through society—mean that sometimes it's in society's best interest to not punish defecting corporations: a fact a smart corporation can use to its advantage.

There is one more societal pressure failure that is unique to large and powerful corporations: the co-option of institutional pressure to further their own self-interest.

Imagine a societal dilemma, one that affects a rich and powerful interest: probably a corporation or an industry, but maybe a person or group of people. It could be the [oil industry wanting](#) government subsidies (in 2011, the U.S. effectively provided \$4.4 billion in tax breaks to this industry alone, not even counting the military costs to protect their supply chains); or the Walt Disney Corporation wanting the government to extend the period of copyright so Mickey Mouse doesn't fall into the public domain. The group interest is to resolve the dilemma fairly. The self-interest for the corporation is to resolve the dilemma in its favor.

Societal Dilemma: Getting public money for projects.	
Society: Society as a whole.	
Group interest: Distribute government money fairly and maintain a level playing field.	Competing interest: Get as much money as you can for your pet projects.
Group norm: Play by the rules.	Corresponding defection: Manipulate the rules.
To encourage people to act in the group interest, the society implements a variety of societal pressures. Moral: It can feel wrong to take too much from the government. Reputational: It can look bad to take too much from the government. Institutional: Laws determine what benefits different interests get, and prohibit any one interest from taking too much. Security: The Congressional Record provides evidence of some of this, assuming anyone actually reads it. There are now websites that try to track political donations.	

If a company can convince the government to resolve the dilemma in its favor, then its self-interest becomes the group interest. In this way, companies can defect in spirit by deliberately changing the laws so they are not defecting in practice—thereby circumventing or subverting societal pressures. So, for example, companies that make car seats, airbags, full-body scanners, compact fluorescent bulbs, car insurance, surveillance cameras, vaccines, radon detectors, and Internet filters for schools have had laws passed mandating—or at least encouraging—their use. And the healthcare industry got a [law passed limiting](#) its liability for care improperly delayed or denied.

In a sense, what corporations are doing here is reversing the principal-agent relationship. They're deliberately manipulating institutional pressures so they can directly benefit from them. In economics, changing laws to suit your desires without adding any value is known as rent-seeking.

One way to manipulate laws is through licensing requirements. Over the past several years, there have been debates in several states about [licensing interior designers](#). It's either a necessary measure to keep charlatans out of the busi-ness, or an onerous, pro-cartel, anti-competitive system. Another way is through public opinion. The political decision not to regulate the derivatives markets is a good example: not only did it involve lobbyists and campaign contributions to get laws changed, but also public relations to convince journalists and the public that keeping the markets unregulated was a good idea.

Here's another example. Hydraulic fracturing, or fracking, is a means of extracting oil and gas from subterranean reservoirs by forcing pressurized fluid into underground rock formations. The process was originally commercialized in 1949 and in its first few decades of use was primarily used to boost production of old wells. Recent advances in [horizontal drilling technology](#), combined with hydraulic fracturing, have enabled the tapping of heretofore inaccessible reserves, and the recent rise in oil prices has made it economically

viable. However, the procedure also poses environmental risks, most notably the risk that chemicals used in the process—including methanol, benzene, and diesel fuel—might contaminate ground water, degrade air quality, and migrate to the earth's surface; and that the resultant toxic wastewater might be impossible to decontaminate.<sup>13</sup> This societal dilemma sounds a lot like the monk parakeet example from Chapter 9, and you'd expect society to figure out whether this procedure is worth it. But the companies that use the procedure—Halliburton is a big player here—lobbied successfully for a provision in the 2005 Bush administration energy bill exempting fracking from regulation by the U.S. Environmental Protection Agency under the Safe Drinking Water Act.<sup>14</sup> That's the effect of reversing the principal-agent relationship: the government becomes the agent of the corporation.

One common way to do this is regulatory capture, which we'll talk about in the next chapter. Another way is to simply be unregulatable for political or economic reasons. Homebuilders have been sued repeatedly over the past decade for [shoddy building practices](#), many of them illegal. "Too big to regulate" is how one source put it, making it impossible for homeowners to know they're getting a substandard house until it's too late. The banking industry is similarly trying very hard to be unregulatable, claiming that any regulations would damage the economy more than it would help it.

When it comes to organizations, size is proportional to power. Legislative bodies used to rule fewer people and smaller geographic areas. In the United States, many laws that were passed by states in the 1800s became federal matters in the 1900s. There's nothing sinister about it; it's just that it now makes more sense to deal with these laws on that scale. Today, international legislative bodies have increasingly more power—simply because more things make sense to deal with on a multinational level.

This is especially true in corporations. Broadly speaking, there's a natural size of an organization based on the technology of its time. The average organization size [used to be smaller](#), became larger, and now is even larger. Historically, there have only been a few very large organizations: the Roman Empire, the Catholic Church, and so on. These worked because they were organizations of organizations. That's how countries work; the U.S. has federal, state, and municipal governments. That's also how feudalism, militaries, franchise stores, and large multinational corporations work.

It still works this way, but we're better at it now. Organizational size is restricted by the limits of moving information around. Different people within, and different parts of, an organization need to communicate with each other; and the larger an organization, the harder that is to do. Most organizations are hierarchical, making communications easier. And militaries have generally been examples of the largest-sized organization a particular technological level can produce. But there's a limit where the costs of communications outweigh the value of being part of one organization. Economist [Ronald Coase first](#) pointed this out in 1937. Called "Coase's limit" or "Coase's ceiling," it's the point of diminishing returns for a company: where adding another person to an organization doesn't actually add any value to the organization. You can think of an employee inside of an organization having two parts to his job: coordinating with people inside the organization and doing actual work that makes the company money. Some people are wholly focused inside the organization: the HR department, for example. Others do the actual work, but still have internal coordination roles. There's a point where adding an additional person to the organization increases the internal coordination for everyone else to a point that's greater than the additional actual work he does. So, the company actually loses money overall by hiring him.<sup>15</sup> The ease of collecting, moving, compiling, analyzing, and disseminating information affects Coase's ceiling, and one of the effects of information technology is that it raises Coase's ceiling because the resultant efficiency increases.<sup>16</sup>

Larger size has several effects on societal dilemmas:

- Large corporations can do more damage by defecting. A single company, Enron, did \$11 billion worth of financial damage to the U.S. economy. That much damage might previously have required ten smaller companies to defect. This means that as large corporations grow, fewer defectors can do even more damage. So society needs more security, to further reduce the amount of defection, in order to keep the potential damage constant.
- Individuals within a large corporation can defect from the corporation to a greater degree, for greater personal gain and to the greater detriment of the corporation. [Nick Leeson's](#) unauthorized trading while he worked for Barings Bank destroyed the entire company in 1995. Kenneth Lay, Jeffrey Skilling, and other senior Enron executives destroyed that company. [Kweku Adoboli](#) lost \$2.3 billion for the investment bank UBS in 2011.
- Large corporations have more power to deliberately manipulate societal pressures. This includes getting laws passed specifically to benefit them, and engaging in jurisdictional arbitrage by deliberately moving certain operations to certain countries in order to take advantage of local laws. [Different countries](#) have different, often conflicting, laws about price-fixing, and international companies have an easier time forming cartels. This sort of thing can be more local, too. Until recently, [Amazon.com used its](#) large national footprint and lack of physical stores to avoid having to charge sales tax in most states.
- Punishing a large corporation might result in so much cost or damage to society that it makes sense to let them get away with their wrongdoing. The ultimate expression of this is when a company is "too big to fail": when the government is so afraid of the secondary effects of a company going under that they will bail the company out in order to prevent it.<sup>17</sup>
- Individuals within large corporations can be emotionally further away from the individuals they're

affecting when they make decisions about whether to cooperate or defect. Remember that moral pressure decreases in effectiveness with emotional distance. The larger the corporation, the larger the tendency towards emotional distance.

- Larger corporations have more to lose by defecting. Their reputation is more valuable, and damage to it will have greater effects on the corporation. This serves to restrict what they're willing to do.

Large corporations can also play one societal dilemma off another. Remember our sandwich seller in the market. He's stuck in a societal dilemma with all the other sandwich sellers, and has to set his prices accordingly. In order to prevent the market's sandwich sellers from cooperating, society as a whole—as part of a larger societal dilemma—passes laws to prevent collusion and price-fixing. But a larger sandwich seller has more options. He can expand his product offering across several dimensions:

- *Economies of scale.* He can buy his ingredients in bulk and streamline his production processes.
- *Depth.* More sandwich options.
- *Size.* Larger or smaller sandwiches.
- *Time.* Breakfast sandwiches or sandwiches for midnight snacks.
- *Scope.* Sandwich-like things, such as hot dogs, bagels, wraps, and muffins.
- *Accessories.* Chips and sodas, groceries.
- *Service.* Sandwich subscriptions, delivery, free wi-fi to go along with the sandwiches.

All this makes it much more difficult to enforce the basic societal dilemmas of a market economy. On the face of it, as a seller diversifies, he is now stuck in multiple different societal dilemmas: one with the other sandwich sellers in the market, and another with—for example—chip sellers. But by tying the two products together, perhaps selling a sandwich and chips together, or offering a once-a-week chip subscription with the purchase of a sandwich subscription, he is able to play the two societal dilemmas off each other, taking advantage of both.

We see this with various product schemes. Whether it's Citibank selling credit cards and consumer loans and anti-theft protection plans to go with those credit cards; or Apple selling computer hardware and software; or Verizon bundling telephone, cable, and Internet; product bundles and subscription services hide prices and make it harder for customers to make buying decisions. There's also a moral hazard here. The less Citibank spends on antifraud measures, the more protection plans it can sell; the higher its credit card interest rates, the more attractive its consumer loans are.

Large corporations can also use one revenue stream to subsidize another. So a big-box retail store can temporarily lower its prices so far that it's losing money, in order to drive out competition. Or an airline can do the same with airfares in certain markets to kill an upstart competitor.

Things get even more complicated when sellers have multiple revenue streams from different sources. Apple sells iPhones and iPads to customers, sells the ability to sell customer apps to app vendors, and sells the right to sell phone contracts to phone companies. Magazines sell both subscriptions and their subscription lists. This sort of thing is taken to the extreme by companies like Facebook, which don't even charge their users for their apps at all, and make all their money selling information about those users to third parties.<sup>18</sup> It turns out that offering a product or service for [free is very different](#) than offering it cheaply, and that “free” perturbs markets in ways no one fully understands. The optimal way to do business in an open-air market—offer the best products at the lowest prices—fails when there are other revenue streams available.

An additional complication arises with products and services that have high barriers to entry; it's hard for competitors to emerge. In an open-air market, if the sandwich vendors all sell their sandwiches at too-high prices, someone else can always come in and start selling cheaper sandwiches. This is much harder to do with cell phone networks, or computer operating systems, or airline tickets, because of the huge upfront costs. And industries can play the meta-game to prevent competition, as when the automobile industry bought and then dismantled cities' trolley networks, big agriculture lobbied government to impose draconian regulations on small farms, and so on.

There's one more problem with the technological corporations that doesn't really exist on the small scale of an open-air market: the risks of defection can be greater than the total value of the corporations themselves. An example will serve to explain.

[Chemical plants](#) are a terrorism risk. Toxins such as phosgene, chlorine, and ammonia could be dispersed in a terrorist attack against a chemical plant. And depending on whose numbers you believe, [hundreds of plants](#) threaten hundreds of thousands of people and some threaten millions. This isn't meant to scare you; there's a lot of debate on how realistic this sort of terrorist attack is right now.

In any case, the question remains of how best to secure chemical plants against this threat. Normally, we leave the security of something up to its owner. The basic idea is that the owner of each chemical plant best understands the risks, and is the one who loses out if security fails. Any outsider—in this case, a regulatory agency—is just going to get it wrong.

And chemical plants do have security. They have fences and guards. They have computer and network security. They have fail-safe mechanisms built into their operations.<sup>19</sup> There are regulations they have to follow. [The problem is](#) that might not be enough. Any rational chemical-plant owner will only secure the plant up to its value to him. That is, if the plant is worth \$100 million, it makes no sense to spend \$200 million on securing it. If the odds of it being attacked are less than 1%, it doesn't even make sense to spend \$1 million on securing it. The math is more complicated than this, because you have to factor in such things as the reputational cost of having your name splashed all over the media after an incident, but that's the basic idea.



But to society, the cost of an actual attack could be much, much greater. If a terrorist blows up a particularly toxic plant in the middle of a densely populated area, deaths could be in the tens of thousands and damage could be in the hundreds of millions. Indirect economic damage could be in the billions. The owner of the chlorine plant would pay none of these costs; to him, they are externalities borne by society as a whole.

Sure, the owner could be sued. But he's not at risk for more than the value of his company, and the outcome of a lawsuit is by no means preordained. Expensive lawyers can work wonders, courts can be fickle, and the government could step in and bail him out (as it did with airlines after 9/11). And a smart company can often protect itself by spinning off the risky asset in a subsidiary company, or selling it off completely. Mining companies do this all the time.

The result of all this is that, by leaving the security to the owner, we don't get enough of it.

In general, the person responsible for a risk trade-off will make the trade-off that is most beneficial to *him*. So when society designates an agent to make a risk trade-off on its behest, society has to solve the principal-agent problem and ensure that the agent makes the same trade-off that society would. We'll see how this can fail with government institutions in the next chapter; in this case, it's failing with corporations.

Think back to the sandwich sellers in the local market. Merchant Alice is one of those sandwich sellers, and a dishonest, unscrupulous one at that. She has no moral—or reputational—issues with potentially poisoning her buyers. In fact, the only thing that's standing in the way of her doing so is the law. And she's going to do the math.

She has the opportunity of making her sandwiches using some substandard but cheaper process. Maybe she's buying ingredients that aren't as clean. Whatever she's doing, it's something that saves her money but is undetectable by her customers.

If her increased profit for selling potentially poisonous sandwiches is \$10,000, and the chance of her getting caught and fined is 10%, then any fine over \$100,000 will keep her cooperating (assuming she's rational and that losing \$100,000 matters to her).

Now consider a large sandwich corporation, ALICE Foods. Because ALICE Foods sells so many more sandwiches, its increased profit from defecting is \$1,000,000. With the same 10% probability of penalty, the fine has to be over \$10,000,000 to keep it from defecting. But there's another issue. ALICE Foods only has \$5,000,000 in assets. For it, the maximum possible fine is everything the corporation has. Any penalty greater than \$5,000,000 can be treated as \$5,000,000. So ALICE Foods will rationally defect for any increased profit greater than \$500,000, regardless of what the fine is set at (again, assuming the same 10% chance of being fined and no semblance of conscience).

Think of it this way. Suppose ALICE Foods makes \$10,000,000 a year, but has a 5% chance of killing lots of people (or of encountering some other event that would bankrupt the company). Over the long run, this is a guaranteed loss-making business. But in the short term, management can expect ten years of profit. There is considerable incentive for the CEO to take the risk.

Of course, that incentive is counteracted by any laws that ascribe personal liability for those decisions. And the difficulty of doing the math means that many companies won't make these sorts of conscious decisions. But there always will be some defectors that will.

This problem occurs more frequently as the value of defecting increases with respect to the total value to the company. It's much easier for a large corporation to make many millions of dollars through breaking the law. But as long as the maximum possible penalty to the corporation is bankruptcy, there will be illegal activities that are perfectly rational to undertake as long as the probability of penalty is small enough.<sup>20</sup>

Any company that is too big to fail—that the government will bail out rather than let fail—is the beneficiary of a free insurance policy underwritten by taxpayers. So while a normal-sized company would evaluate both the costs and benefits of defecting, a too-big-to-fail company knows that someone else will pick up the costs. This is a moral hazard that radically changes the risk trade-off, and limits the effectiveness of institutional pressure.

Of course, I'm not saying that all corporations will make these calculations and do whatever illegal activity is under consideration. There are still both moral and reputational pressures in place that keep both individuals and corporations from defecting. But the increasing power and scale of corporations is making this kind of failure more likely. If you assume that penalties are reasonably correlated with damages—and that a company can't buy insurance against this sort of malfeasance—then as companies can do more damaging things, the penalties against doing them become less effective as security measures. If a company can adversely affect the health of tens of millions of people, or cause large-scale environmental damage, the harm can easily dwarf the total value of the company. In a nutshell, the bigger the corporation, the greater the likelihood it could unleash a massive catastrophe on society.

---

## References

### Chapter 1

[contain parasites](#) Cory Doctorow (2005), "All Complex Ecosystems Have Parasites," O'Reilly Emerging Technology Conference, San Diego, California. Christopher Langton, ed. (1994), *Artificial Life III*, Westview Press.

[their own privacy](#) Bruce Schneier (15 Jul 2009), "Facebook Should Compete On Privacy, Not Hide It Away," *The Guardian*.

[effectively looted](#) Jeff Gottlieb (22 Jul 2010), "Bell Council Found Loophole in Law to Allow Big Salaries," *Los Angeles Times*. Jeff Gottlieb and Ruben Vives (8 Aug 2010), "Bell Councilman 'Ashamed,' 'Disgusted' that Rizzo Earned \$1.5 Million," *Los Angeles Times*.

[internal cheating](#) Greg Hoglund and Gary McGraw (2007), *Exploiting Online Games; Cheating Massively Distributed Systems*, Addison-Wesley Professional.

[trust is a bet](#) Piotr Sztompka (1999), *Trust: A Sociological Theory*, Cambridge University Press, 25.

[Trust involves](#) Russell Hardin (1992), "The Street-Level Epistemology of Trust," *Analyse & Kritik*, 14:152–76.

[impersonal trust](#) Susan P. Shapiro (1987), "The Social Control of Impersonal Trust," *American Journal of Sociology*, 93:623–58.

[described trust](#) Don Tapscott and David Ticoll (2003), *The Naked Corporation: How the Age of Transparency Will Revolutionize Business*, Free Press.

[Trust is the expectation](#) Francis Fukuyama (1995), *Trust: The Social Virtues and the Creation of Prosperity*, Simon & Schuster, 26.

[three critical functions](#) Barbara Misztal (1996), *Trust in Modern Societies: The Search for the Bases of Social Order*, Cambridge Polity Press.

[recent example](#) David Remnick (1993), *Lenin's Tomb: The Last Days of the Soviet Empire*, Random House.

[value of trust](#) Francis Fukuyama (1995), *Trust: The Social Virtues and the Creation of Prosperity*, Simon & Schuster. Barbara Misztal (1996), *Trust in Modern Societies: The Search for the Bases of Social Order*, Cambridge Polity Press. Adam B. Seligman (1997), *The Problem of Trust*, Princeton University Press. Piotr Sztompka (1999), *Trust: A Sociological Theory*, Cambridge University Press. Steven M.R. Covey (2006), *The Speed of Trust: The One Thing That Changes Everything*, Free Press.

[trust is the atmosphere](#) Sissela Bok (1978), *Lying: Moral Choice in Private and Public Life*, Pantheon Books, 31.

## Chapter 2

[territorial chorus](#) Tim Clutton-Brock (2009), "Cooperation between Non-Kin in Animal Societies," *Nature*, 462:51–7.

[hornworms](#) André Kessler, Rayko Halitschke, Celia Diezel, and Ian T. Baldwin (2006), "Priming of Plant Defense Responses in Nature by Airborne Signaling between *Artemisia tridentata* and *Nicotiana attenuate*," *Oecologia*, 148:280–92.

[plasmids secrete](#) Michael B. Yarmolinsky (1995), "Programmed Cell Death in Bacterial Populations," *Science*, 267:836–7.

[Heat and light](#) Henry Lutz Ehrlich and Dianne K. Newman (2009), *Geomicrobiology*, CRC Press. Smithsonian Institution (2009), "The Archean: The First Life on Earth," in *Geologic Time: The Story of a Changing Earth*, Department of Paleobiology, National Museum of Natural History, Smithsonian Institution.

[first animal predator](#) Ben Harder (9 Apr 2002), "Was This the Earth's First Predator?" *National Geographic*.

[The Selfish Gene](#) Richard Dawkins (1976), *The Selfish Gene*, Oxford University Press.

[defend against](#) William D. Hamilton, Robert Axelrod, and Reiko Tanese (1990), "Sexual Reproduction as an Adaptation to Resist Parasites (A Review)," *Proceedings of the National Academy of Sciences of the United States of America*, 97:3566–73. Levi T. Morran, Olivia G. Schmidt, Ian A. Gelarden, Raymond C. Parrish II, and Curtis M. Lively (2011), "Running with the Red Queen: Host-Parasite Coevolution Selects for Biparental Sex," *Science*, 333:216–18.

[jawed fish](#) Charles A. Janeway (2006), *Immunobiology: The Immune System in Health and Disease*, Sixth Edition, Taylor & Francis Group.

[orienting response](#) Ivan P. Pavlov (1927), *Conditioned Reflexes: An Investigation of the Physiological Activity of the Cerebral Cortex*, tr. G.V. Anrep, Oxford University Press. Evgeni Nikolaevich Sokolov (1963), "Higher Nervous Functions: The Orienting Reflex," *Annual Review of Physiology*, 25:545–80.

[particularly good](#) Joshua New, Leda Cosmides, and John Tooby (2007), "Category-Specific Attention for Animals Reflects Ancestral Priorities, Not Expertise," *Proceedings of the National Academy of Sciences of the United States of America*, 104:16598–603. Lynn Isabell (2009), *The Fruit, the Tree, and the Serpent: Why We See So Well*, Harvard University Press.

[throw things](#) Justin N. Wood, David D. Glynn, and Marc D. Hauser (2007), "The Uniquely Human Capacity to Throw Evolved from a Non-Throwing Primate: An Evolutionary Dissociation between Action and Perception," *Biology Letters*, 3:360–5.

[size-weight misperception](#) Qin Zhu and Geoffrey P. Bingham (2011), "Human Readiness to Throw: The Size-Weight Illusion Is Not an Illusion When Picking the Best Objects to Throw," *Evolution & Human Behavior*, 32:288–93.

[Similar stories](#) Stephen Jay Gould (Oct 1985), "Not Necessarily a Wing," *Natural History*, 94:12–25.

[weird security](#) Randolph M. Nesse (2001), "The Smoke Detector Principle: Natural Selection and the Regulation of Defensive Responses," *Annals of the New York Academy of Sciences*, 935:75–85.

[Red Queen Effect](#) Leigh Van Valen (1973), "A New Evolutionary Law," *Evolutionary Theory*, 1:1–30. Leigh Van Valen (1977), "The Red Queen," *The American Naturalist*, 111:809–10. Matt Ridley (1994), *The Red Queen: Sex and the Evolution of Human Nature*, MacMillan Publishing Co.

[continuously improve](#) Seth Finnegan, Jonathan L. Payne, and Steve C. Wang (2008), "The Red Queen Revisited: Reevaluating the Age Selectivity of Phanerozoic Marine Genus Extinctions," *Paleobiology*, 34:318–41. Michael J. Benton (2009), "The Red Queen and the Court Jester: Species Diversity and the Role of Biotic and Abiotic Factors Through Time," *Science*, 323:728–32. Michael J. Benton (2010), "Evolutionary Biology: New Take On the Red Queen," *Nature*, 463:306–7.

[other animals](#) Edward A. Wasserman, Thomas R. Zentall (2006), *Comparative Cognition: Experimental Explorations of Animal Intelligence*, Oxford University Press. Zhanna Reznikova (2007), *Animal Intelligence: From Individual to Social Cognition*, Cambridge University Press. Jeremy Taylor (2009), *Not a Chimp: The Hunt to Find the Genes That Make Us Human*, Oxford University Press.

[supply our brains](#) Adam D. Pfefferle, Lisa R. Warner, Catrina W. Wang, William J. Nielsen, Courtney C. Babbitt, Olivier Fedrigo, and Gregory A. Wray (2011), "Comparative Expression Analysis of the Phosphocreatine Circuit in Extant Primates: Implications for Human Brain Evolution," *Journal of Human Evolution*, 60:205–12.

[cultural evolution](#) Gregory Cochran and Henry Harpending (2009), *The 10,000 Year Explosion: How Civilization Accelerated Human Evolution*, Basic Books.

[Nicholas Humphrey](#) Nicholas Humphrey (1976), "The Social Function of Intellect," in Paul Patrick Gordon Bateson and Robert A. Hinde, eds., *Growing Points in Ethology*, Cambridge University Press, 303–17.

[Daniel Gilbert](#) Daniel Gilbert (2 Jul 2006), "If Only Gay Sex Caused Global Warming," *Los Angeles Times*.

[capacity for deception](#) Richard W. Byrne and Nadia Corp (2004), "Neocortex Size Predicts Deception Rate in Primates," *Proceedings of the Royal Society B: Biological Sciences*, 271:1693–9.

[non-primate mammals](#) James K. Rilling and Thomas R. Insel (1999), "The Primate Neocortex in Comparative Perspective Using Magnetic Resonance Imaging," *Journal of Human Evolution*, 37:191–223.

[neocortex correlates](#) Robin I.M. Dunbar (1992), "Neocortex Size as a Constraint on Group Size in Primates," *Journal of Human Evolution*, 20:469–93.

[mean human group](#) Robin I.M. Dunbar (2003), "The Social Brain: Mind, Language, and Society in Evolutionary Perspective," *Annual Review of Anthropology*, 32:163–81. Alberto Hernando, Diego Villuendas, Cristina Vesperinas, Marta Abad, and Ángel Plastino (2010), "Unravelling the Size Distribution of Social Groups with Information Theory on Complex Networks," *The European Physical Journal B: Condensed Matter & Complex Systems*, 76:87–97.

[number appears regularly](#) R.A. Hill and Robin I.M. Dunbar (2003), "Social Network Size in Humans," *Human Nature*, 14:53–72.

[mean group size](#) Robin I.M. Dunbar (2003), "The Social Brain: Mind, Language, and Society in Evolutionary Perspective," *Annual Review of Anthropology*, 32:163–81.

[died in warfare](#) Steven A. LeBlanc and Katherine E. Register (2003), *Constant Battles: Why We Fight*, St. Martin's Press. Samuel Bowles (2009), "Did Warfare Among Ancestral Hunter-Gatherers Affect the Evolution of Human Social Behaviors?" *Science*, 324:1293–8.

[Paul Seabright](#) Paul Seabright (2004), *The Company of Strangers: A Natural History of Economic Life*, Princeton University Press.

[other species](#) J. Maynard Smith and George R. Price (1973), "The Logic of Animal Conflict," *Nature*, 246:15–8.

[should primarily hunt](#) Craig B. Stanford (2001), "A Comparison of Social Meat-Foraging by Chimpanzees and Human Foragers," in Craig B. Stanford and H. Bunn, eds., *Meat-Eating and Human Evolution*, Oxford University Press. Gottfried Hohmann (2009), "The Diets of Non-Human Primates: Frugivory, Food Processing, and Food Sharing," in Jean-Jacques Hublin, Michael P. Richards, eds. (2009), *The Evolution of Hominin Diets: Integrating Approaches to the Study of Palaeolithic Subsistence*, Springer.

[all primitive societies](#) Steven A. LeBlanc and Katherine E. Register (2003), *Constant Battles: Why We Fight*, St. Martin's Press.

[David Buss](#) David M. Buss (2006), *The Murderer Next Door: Why the Mind Is Designed to Kill*, Penguin, 40.

[quite violent](#) Steven A. LeBlanc and Katherine E. Register (2003), *Constant Battles: Why We Fight*, St. Martin's Press. David M. Buss (2006), *The Murderer Next Door: Why the Mind Is Designed to Kill*, Penguin. Bureau of Justice Statistics (1994), "Violent Crime," U.S. Department of Justice.

[some argue](#) Steven Pinker (2011), *The Better Angels of Our Nature: Why Violence Has Declined*, Viking.

[kill in war](#) Dave Grossman (1995), *On Killing: The Psychological Cost of Learning to Kill in War and Society*, Little, Brown & Co.

[with other primates](#) Lars Rodseth, Richard W. Wrangham, Alisa M. Harrigan, and Barbara B. Smuts (1991), "The Human Community as a Primate Society," *Current Anthropology*, 32:221–54. Bruce M. Knauft (1991), "Violence and Sociality in Human Evolution," *Current Anthropology*, 32:391–428. Christoph P.E. Zollikofer, Marcia S. Ponce de Leon, Bernard Vandemeersch, and Francois Leveque (2002), "Evidence for Interpersonal Violence in the St.



Cesaire Neanderthal,"*Proceedings of the National Academy of Sciences of the United States of America*, 99:6444–8. Margaret C. Crofoot and Richard W. Wrangham (2010), "Intergroup Aggression in Primates and Humans: The Case for a Unified Theory," in Peter M. Kappeler and Joan M. Silk, eds., *Mind the Gap: Tracing the Origins of Human Universals*, Springer.

## Chapter 3

[division of labor](#) Edward O. Wilson (1987), "Causes of Ecological Success: The Case of the Ants," *Journal of Animal Ecology*, 56:1–9. Bert Holldobler and Edward O. Wilson (2009), *The Superorganism: The Beauty, Elegance, and Strangeness of Insect Societies*, W.W. Norton & Co. Bert Holldobler and Edward O. Wilson (2010), *The Leafcutter Ants: Civilization by Instinct*, W.W. Norton & Co.

[Hawk-Dove game](#) John Maynard Smith and George R. Price (1973), "The Logic of Animal Conflict," *Nature*, 246:15–8.

[war of all against all](#) Thomas Hobbes (1651), *Leviathan*, Printed for Andrew Crooke, at the Green Dragon in St. Paul's Churchyard.

[compassion extended](#) Penny Spikins, Holly Rutherford, and Andy Needham (2010), "From Homininity to Humanity: Compassion from the Earliest Archaic to Modern Humans," *Time and Mind*, 3:303–25. Priyali Rajagopal and Nicole Votolato Montgomery (2011), "I Imagine, I Experience, I Like: The False Experience Effect," *The Journal of Consumer Research*, 38:578–94.

[invention of agriculture](#) Robert Boyd and Peter Richerson (2004), *Not by Genes Alone: How Culture Transformed Human Evolution*, University of Chicago Press.

[Unrelated elephants](#) Joshua M. Plotnik, Richard Lair, Wirot Suphachoksahakun, and Frans de Waal (2011), "Elephants Know When They Need a Helping Trunk in a Cooperative Task," *Proceedings of the National Academy of Sciences of the United States of America*, published online before print.

[ritualized battles](#) Mark Briffa (2010), "Territoriality and Aggression," *Nature Education Knowledge*, 1:19. Craig Packer and Anne E. Pusey (1985), "Asymmetric Contests in Social Mammals Respect, Manipulation and Age-Specific Aspects," in Paul J. Greenwood, Paul H. Harvey, and Montgomery Slatkin, eds., *Evolution: Essays in Honour of John Maynard Smith*, Cambridge University Press, 173–86. Tabitha M. Innocent and Stuart A. West (2006), "Social Evolution: Cooperation by Conflict," *Current Biology*, 16:365–67. Hanna Kokko, Andrés López-Sepulcre, and Lesley J. Morrell (2006), "From Hawks and Doves to Self-Consistent Games of Territorial Behavior," *The American Naturalist*, 167:901–12.

[Vampire bats](#) Gerald S. Wilkinson (1984), "Reciprocal Food Sharing in the Vampire Bat," *Nature*, 308:181–4.

[large frontal](#) lobes Kunwar P. Bhatnagar (2008), "The Brain of the Common Vampire Bat, *Desmodus rotundus murinus* (Wagner, 1840): A Cytoarchitectural Atlas," *Brazilian Journal of Biology*, 68:583–99.

[help each other](#) Robert L. Trivers (1971), "The Evolution of Reciprocal Altruism," *Quarterly Review of Biology*, 46:35–7.

[transactional analysis](#) Eric Berne (1996), "Principles of Transactional Analysis," *Indian Journal of Psychiatry*, 38:154–9.

[potential mate](#) Amotz Zahavi (1975), "Mate Selection: A Selection for a Handicap," *Journal of Theoretical Biology*, 53:205–14. Amotz Zahavi (1977), "The Cost of Honesty (Further Remarks on the Handicap Principle)," *Journal of Theoretical Biology*, 67:603–5. Amotz Zahavi (1977), "Reliability in Communication Systems and the Evolution of Altruism," in Bernard Stonehouse and Christopher M. Perrins, eds., *Evolutionary Ecology*, Macmillan, 253–9. Rufus A. Johnstone (1995), "Sexual Selection, Honest Advertisement and the Handicap Principle: Reviewing the Evidence," *Biological Reviews*, 70:1–65. Amotz Zahavi and Avishag Zahavi (1997), *The Handicap Principle: A Missing Piece of Darwin's Puzzle*, Oxford University Press. Amotz Zahavi (2003), "Indirect Selection and Individual Selection in Sociobiology: My Personal Views on Theories of Social Behaviour," *Animal Behaviour*, 65:859–63.

[altruistic acts](#) Randolph M. Nesse (2007), "Runaway Social Selection for Displays of Partner Value and Altruism," *Biological Theory*, 2:143–55.

[kind people](#) Charlie L. Hardy and Mark Van Vugt (2006), "Nice Guys Finish First: The Competitive Altruism Hypothesis," *Personality & Social Psychology Bulletin*, 32:1402–13. Lauri A. Jensen-Campbell, Jennifer M. Knack, and Haylie L. Gomez (2010), "The Psychology of Nice People," *Social & Personality Psychology Compass*, 4:1042–56. Pat Barclay (2010), "Altruism as a Courtship Display: Some Effects of Third-Party Generosity on Audience Perceptions," *British Journal of Psychology*, 101:123–35. Timothy A. Judge, Beth A. Livingston, and Charlice Hurst (2011), "Do Nice Guys and Gals Really Finish Last? The Joint Effects of Sex and Agreeableness on Income," *Journal of Personality & Social Psychology*, in press.

[George Price](#) Oren S. Harman (2010), *The Price of Altruism: George Price and the Search for the Origins of Kindness*, W.W. Norton & Co.

[bargaining games](#) Gary E. Bolton (1998), "Bargaining and Dilemma Games: From Laboratory Data Towards Theoretical Synthesis," *Experimental Economics*, 1:257–81.

[found a coin](#) Paula F. Levin and Alice M. Isen (1972), "The Effect of Feeling Good on Helping: Cookies and Kindness," *Journal of Personality & Social Psychology*, 21:384–8.



[flying through clouds](#) Lawrence J. Sanna, Edward C. Chang, Paul M. Miceli, and Kristjen B. Lundberg (2011), "Rising Up to Higher Virtues: Experiencing Elevated Physical Heights Uplifts Prosocial Actions," *Journal of Experimental & Social Psychology*, 47:472–6.

[mirror neurons](#) Giuseppe di Pellegrino, Luciano Fadiga, Leonardo Fogassi, Vittorio Gallese, and Giacomo Rizzolatti (1992), "Understanding Motor Events: A Neurophysiological Study," *Experimental Brain Research*, 91:176–80. Vittorio Gallese, Luciano Fadiga, Leonardo Fogassi, and Giacomo Rizzolatti (1996), "Action Recognition in the Premotor Cortex," *Brain*, 119:593–609. Vittorio Gallese and Alvin Goldman (1998), "Mirror Neurons and the Simulation Theory of Mind-Reading," *Trends in Cognitive Sciences*, 2:493–501.

[altruistic innately](#) Ernst Fehr and Simon Gächter (2002), "Altruistic Punishment in Humans," *Nature*, 415:137–40. Alan G. Sanfey, James K. Rilling, Jessica A. Aronson, Leigh E. Nystrom, and Jonathan D. Cohen (2003), "The Neural Basis of Economic Decision-Making in the Ultimatum Game," *Science*, 300:1755–8. Tania Singer, Ben Seymour, John P. O'Doherty, Klass E. Stephan, Raymond J. Dolan, and Chris D. Frith (2006), "Empathic Neural Responses Are Modulated by the Perceived Fairness of Others," *Nature*, 439:466–9. Molly J. Crockett, Luke Clark, Golnaz Trabibnia, Matthew D. Lieberman, and Trevor W. Robbins (2008), "Serotonin Modulates Behavioral Reactions to Unfairness," *Science*, 320:1739. Molly J. Crockett, Luke Clark, Marc D. Hauser, and Trevor W. Robbins (2010), "Serotonin Selectively Influences Moral Judgment and Behavior Through Effects on Harm Aversion," *Proceedings of the National Academy of Sciences of the United States of America*, 107:17433–8.

[fairness and justice](#) Katarina Gospic, Erik Mohlin, Peter Fransso, Predrag Petrovic, Magnus Johannesson, and Martin Ingvar (2011), "Limbic Justice: Amygdala Involvement in Immediate Rejection in the Ultimatum Game," *PLoS Biology*, 9 (5): e1001054.

[and attractive](#) Tania Singer, Ben Seymour, John P. O'Doherty, Klass E. Stephan, Raymond J. Dolan, and Chris D. Frith (2006), "Empathic Neural Responses Are Modulated by the Perceived Fairness of Others," *Nature*, 439:466–9.

[found that oxytocin](#) Paul J. Zak, Robert Kurzban, and William T. Matzner (2003), "Oxytocin Is Associated with Interpersonal Trust in Humans," *PLoS ONE*, 2:11, e1128. Zoe R. Donaldson and Larry J. Young (2008), "Oxytocin, Vasopressin, and the Neurogenetics of Sociality," *Science*, 322:900–4.

[someone's oxytocin](#) Michael Kosfeld, Marcus Heinichs, Paul J. Zak, Urs Fischbacher, and Ernst Fehr (2003), "Oxytocin Increases Trust in Humans," *Nature*, 435:673–6.

[Adam Smith](#) Adam Smith (1759), *The Theory of Moral Sentiments*.

[non-kin groups](#) Martin A. Nowak (2006), "Five Rules for the Evolution of Cooperation," *Science*, 314:1560–3. Martin A. Nowak and Roger Highfield (2011), *SuperCooperators: Altruism, Evolution, and Why We Need Each Other to Succeed*, Free Press.

[Indirect reciprocity](#) Martin A. Nowak and Karl Sigmund (1998), "Evolution of Indirect Reciprocity by Image Scoring," *Nature*, 393:573–7. Martin A. Nowak and Karl Sigmund (1998), "The Dynamics of Indirect Reciprocity," *Journal of Theoretical Biology*, 194:561–74. Manfred Milinski, Dirk Semmann, Theo C.M. Bakker, and Hans-Jürgen Krambeck (2001), "Cooperation Through Indirect Reciprocity: Image Scoring or Standing Strategy?" *Proceedings of the Royal Society B: Biological Sciences*, 268:2495–501.

[biological models](#) Herbert Gintis (2003), "The Hitch-Hikers Guide to Altruism: Genes, Culture, and the Internalization of Norms," *Journal of Theoretical Biology*, 220:407–18.

[Patricia Churchland](#) Patricia S. Churchland (2011), *Braintrust: What Neuroscience Tells Us About Morality*, Princeton University Press, 93.

[our murderousness](#) Samuel Bowles (2006), "Group Competition, Reproductive Leveling, and the Evolution of Human Altruism," *Science*, 314:1569–72. Jung-Kyoo Choi and Samuel Bowles (2007), "The Coevolution of Parochial Altruism and War," *Science*, 318:636–40.

[And these processes](#) Robert Boyd and Peter J. Richerson (1985), *Culture and the Evolutionary Process*, University of Chicago Press. Robert Bettinger, Peter J. Richerson, and Robert Boyd (1995), "Can Group Functional Behaviors Evolve by Cultural Group Selection?" *Current Anthropology*, 36:473–94.

## Chapter 4

[Robert Sapolsky](#) Robert Sapolsky (2003), "A Bozo of a Baboon: A Talk with Robert Sapolsky," *Edge*.

[Matt Ridley](#) Matt Ridley (1993), *The Red Queen: Sex and the Evolution of Human Nature*, HarperCollins Publishers, 9–10.

[hyperbolic discounting](#) Richard H. Thaler (1981), "Some Empirical Evidence on Dynamic Inconsistency," *Economics Letters*, 8:201–7. Shane Frederick, George Loewenstein, and Ted O'Donoghue (2002), "Time Discounting and Time Preference: A Critical Review," *Journal of Economic Literature*, 40:351–401.

[Francis Fukuyama](#) Francis Fukuyama (1995), *Trust: The Social Virtues and the Creation of Prosperity*, Simon & Schuster, 27–8.

[James Madison](#) James Madison (1788), *The Federalist*, 51.

[many distinct levels](#) Richard J. Smith (1996), "Biology and Body Size in Human Evolution: Statistical Inference Misapplied," *Current Anthropology*, 37:451–81.

[begin to fail](#) Bruce Schneier (Jul 2009), "Security, Group Size, and the Human Brain," *IEEE Security & Privacy*, 7:88.  
[Code of Hammurabi](#) Martha T. Roth (1997), *Law Collections from Mesopotamia and Asia Minor*, Scholars Press.

## Chapter 5

[Douglas Hofstadter](#) Douglas Hofstadter (1985), *Metamagical Themas*, Bantam Dell Publishing Group.

[free-rider problem](#) Robert Albanese and David D. van Fleet (1985), "Rational Behavior in Groups: The Free-Riding Tendency," *The Academy of Management Review*, 10:244–55.

[Whooping cough](#) Paul Offit (2011), *Deadly Choices: How the Anti-Vaccine Movement Threatens Us All*, Basic Books.

## Chapter 6

[don't overfish](#) Boris Worm, Ray Hilborn, Julia K. Baum, Trevor A. Branch, Jeremy S. Collie, Christopher Costello, Michael J. Fogarty, Elizabeth A. Fulton, Jeffrey A. Hutchings, Simon Jennings, Olaf P. Jensen, Heike K. Lotze, Pamela M. Mace, Tim R. McClanahan, C il n Minto, Stephen R. Palumbi, Ana M. Parma, Daniel Ricard, Andrew A. Rosenberg, Reg Watson, and Dirk Zeller (2009), "Rebuilding Global Fisheries," *Science*, 325:578–85. Ed Pilkington (17 May 2010), "Saving Global Fish Stocks Would Cost 20 Million Jobs, Says UN," *The Guardian*.

[Jean-Jacques Rousseau](#) Jean-Jacques Rousseau (1754), *A Discourse on a Subject Proposed by the Academy of Dijon: What Is the Origin of Inequality of Men, and Is it Authorized by Natural Law?*

[defections happen](#) Brian Skyrms (2004), *The Stag Hunt and the Evolution of Social Structure*, Cambridge University Press.

[Snowdrift Dilemma](#) Michael Doebeli and Christoph Hauert (2005), "Models of Cooperation Based on the Prisoner's Dilemma and the Snowdrift Game," *Ecology Letters*, 8:748–66.

[social dilemmas](#) Robyn M. Dawes (1980), "Social Dilemmas," *Annual Review of Psychology*, 31:169–93. Samuel S. Komorita and Craig D. Parks (1994), *Social Dilemmas*, Westview Press.

[much more complicated](#) Richard H. McAdams (2008), "Beyond the Prisoners' Dilemma: Coordination, Game Theory and the Law," John M. Olin Law and Economics Working Paper No. 437, The Law School, University of Chicago.

[need to conform](#) Solomon Asch (Nov 1955), "Opinions and Social Pressure," *Scientific American*, 193:31–5.

## Chapter 7

[not to vote](#) William Riker and Peter Ordeshook (1968), "A Theory of the Calculus of Voting." *American Political Science Review*, 62:25–42.

[people vote](#) Derek Parfit (1984), *Reasons and Persons*, Oxford University Press.

[actual voters](#) Aaron Edlin, Andrew Gelman, and Noah Kaplan (2007), "Voting as a Rational Choice: Why and How People Vote to Improve the Well-Being of Others," *Rationality and Society*, 19:293–314.

[modified our brains](#) Patricia S. Churchland (2011), *Braintrust: What Neuroscience Tells Us About Morality*, Princeton University Press.

[the murder rate](#) Criminal Justice Information Services Division (2010), "Crime in the United States by Volume and Rate per 100,000 Inhabitants, 1990–2009," U.S. Department of Justice, Federal Bureau of Investigation.

[Elsewhere in the](#) United Nations Office on Drugs & Crime (2008), "The Tenth United Nations Survey of Crime Trends and Operations of Criminal Justice Systems (2005–2006)."

[Golden Rule](#) Jeffrey Wattle (1996), *The Golden Rule*, Oxford University Press.

[associated with religion](#) Azim F. Shariff and Ara Norenzayan, "God is Watching You: Priming God Concepts Increases Prosocial Behavior in an Anonymous Economic Game," *Psychological Science*, 18:803–9.

[Ten Commandments](#) Nina Mazar and Dan Ariely (2006), "Dishonesty in Everyday Life and Its Policy Implications," *Journal of Public Policy & Marketing*, 25:117–26.

[harsh, punitive, vengeful](#) Azim F. Shariff and Ara Norenzayan (2011), "Mean Gods Make Good People: Different Views of God Predict Cheating Behavior," *International Journal for the Psychology of Religion*, 21:85–96.

[pretty much useless](#) Bernard Gert (1989), "Morality Versus Slogans," in Daryl Close and Nicholas Meier, eds. (1995), *Morality in Criminal Justice*, Wadsworth, 51–60.

[kill animals](#) Jeff McMahan (2002), *The Ethics of Killing: Problems at the Margins of Life*, Oxford University Press.

[This is the stuff](#) Alasdair MacIntyre (1981), *After Virtue: A Study in Moral Theology*, University of Notre Dame Press.

[moral instinct](#) Stephen Pinker (13 Jan 2008), "The Moral Instinct," *New York Times Magazine*.

[Others relevant](#) Donald E. Brown (1991), *Human Universals*, Temple University Press.

[specific brain functions](#) Marc D. Hauser (2006), *Moral Minds: How Nature Designed our Universal Sense of Right and Wrong*, Ecco. John Mikhail (2007), "Universal Moral Grammar: Trends, Evidence, and the Future," *TRENDS in Cognitive Sciences*, 11:143–52.

[five fundamental systems](#) Jonathan Haidt and Craig Joseph (2004), "Intuitive Ethics: How Innately Prepared Intuitions Generate Culturally Variable Virtues," *Daedalus*, 55–66. Jonathan Haidt and Jesse Graham (2009), "Planet of the Durkheimians, Where Community, Authority, and Sacredness Are Foundations of Morality," in John T. Jost, Aaron C. Kay, and Hulda Thorisdottir, eds., *Social and Psychological Bases of Ideology and System Justification*, Oxford University Press.

[strong tendency](#) David Berreby (2005), *Us and Them: Understanding Your Tribal Mind*, Little, Brown and Co.

[defer to authority](#) Stanley Milgram (1963). "Behavioral Study of Obedience," *Journal of Abnormal & Social Psychology*, 67:371–8. Neil Lutsy (1995), "When Is 'Obedience' Obedience? Conceptual and Historical Commentary," *Journal of Social Issues*, 51: 55–65. Thomas Blass (1999), "The Milgram Paradigm After 35 Years: Some Things We Now Know About Obedience to Authority," *Journal of Applied Social Psychology*, 29:955–78.

[purity and sanctity](#) Mary Douglas (1978), *Purity and Danger: An Analysis of the Concepts of Pollution and Taboo*, Routledge & Kegan Paul.

[Spontaneous cooperation](#) Rebecca Solnit (2009), *A Paradise Built in Hell: The Extraordinary Communities that Arise in Disaster*, Viking Adult.

[increase in solidarity](#) Randall Collins (2004), "Rituals of Solidarity and Security in the Wake of Terrorist Attack," *Sociological Theory*, 22:58–87.

[increase in prosocial](#) Kathryn S. Steinberg and Patrick M. Rooney (2005), "America Gives: A Survey of Americans' Generosity After September 11," Center on Philanthropy at Indiana University.

[Crime in New York](#) Jason Bram (2003), "New York City's Economy Before and After September 11," *Federal Reserve Bank of New York Second District Highlights, Current Issues in Economics & Finance*, 9:1–6.

[in-group/out-group](#) Colin Holbrook, Paolo Sousa, and Jennifer Hahn-Holbrook (2011), "Unconscious Vigilance: Worldview Defense Without Adaptations for Terror, Coalition, or Uncertainty Management," *Journal of Personality & Social Psychology*, 101:451–66

[increase in hate crimes](#) Tanya Schevitz (26 Nov 2002), "FBI Sees Leap in Anti-Muslim Hate Crimes, 9/11 Attacks Blamed for Bias—Blacks Still Most Frequent Victims," *San Francisco Chronicle*.

[Kin aversion](#) Mark Erickson (1989), "Incest Avoidance and Familial Bonding," *Journal of Anthropological Research*, 45:267–91. Debra Lieberman, John Tooby, and Leda Cosmides (2003), "Does Morality Have a Biological Basis? An Empirical Test of the Factors Governing Moral Sentiments Relating to Incest," *Proceedings of the Royal Society B: Biological Sciences*, 270:819–26. John M. Ingham and David H. Spain (2005), "Sensual Attachment and Incest Avoidance in Human Evolution and Child Development," *Journal of the Royal Anthropological Institute*, 11:677–701. Robin Fox (1984), *The Red Lamp of Incest: An Enquiry into the Origin of Mind and Society*, University of Notre Dame Press.

[protective impulses](#) Sarah Hall Sternglanz, James L. Gray, and Melvin Murakami (1977), "Adult Preferences for Infantile Facial Features: An Ethological Approach," *Animal Behaviour*, 25:108–15. Katherine A. Hildebrandt and Hiram E. Fitzgerald (1979), "Facial Feature Determinants of Perceived Infant Attractiveness," *Infant Behavior & Development*, 2:329–39. Morten L. Kringelbach, Annukka Lehtonen, Sarah Squire, Allison G. Harvey, Michelle G. Craske, Ian E. Holliday, Alexander L. Green, Tipu Z. Aziz, Peter C. Hansen, Piers L. Cornelissen, and Alan Stein (2008), "A Specific and Rapid Neural Signature for Parental Instinct," *PLoS ONE*, 3:e1664. Melanie L. Glocker, Daniel D. Langleben, Kosha Ruparel, James W. Loughhead, Ruben C. Gur, and Norbert Sachser (2009), "Baby Schema in Infant Faces Induces Cuteness Perception and Motivation for Caretaking in Adults," *Ethology*, 115:257–63.

[small animals](#) Wakako Sanefuji, Hidehiro Ohgami, and Kazuhide Hashiya (2007), "Development of Preference for Baby Faces Across Species in Humans (*Homo sapiens*)," *Journal of Ethology*, 25:249–54.

[even dolls](#) Robert A. Hinde and L.A. Barden (1985), "The Evolution of the Teddy Bear," *Animal Behaviour*, 33:1371–3. Paul H. Morris, Vasudevi Reddy, and R.C. Bunting (1995), "The Survival of the Cutest: Who's Responsible for the Evolution of the Teddy Bear?" *Animal Behaviour*, 50:1697–700.

[notions of fairness](#) Joseph Henrich, Jean Ensminger, Richard McElreath, Abigail Barr, Clark Barrett, Alexander Bolyanatz, Juan Camilo Cardenas, Michael Gurven, Edwina Gwako, Natalie Henrich, Carolyn Lesorogol, Frank Marlowe, David Tracer, and John Ziker (2010), "Markets, Religion, Community Size, and the Evolution of Fairness and Punishment," *Science*, 327:1480–4.

[Don't mess with Texas](#) Lilli Rockwell (29 Sep 2006), "'Don't Mess With Texas' Named Top Ad," *Austin American-Statesman*.

[effective in changing](#) Robert B. Cialdini (2003), "Crafting Normative Messages to Protect the Environment," *Current Directions in Psychological Science*, 12:105–9.

[taking advantage](#) Jelena Grujić, Constanza Fosco, Lourdes Araujo, José A. Cuesta, and Angel Sánchez (2010), "Social Experiments in the Mesoscale: Humans Playing a Spatial Prisoner's Dilemma," *PLoS ONE*, 5:11, e13749.

[Andrew Colman](#) Andrew M. Colman (1995), *Game Theory and Its Applications in the Social and Biological Sciences, Second Edition*, Routledge.



[how people evaluate](#) Mark Grenovetter (1978), "Threshold Models of Collective Behavior," *American Journal of Sociology*, 83:1420–43.

[more likely to litter](#) Robert B. Cialdini, Carl A. Kallgren, and Raymond R. Reno (1991), "A Focus Theory of Normative Conduct: A Theoretical Refinement and Reevaluation of the Role of Norms in Human Behavior," *Advances in Experimental Social Psychology*, 21:201–34. Susan M. Reiter and William Samuel (1980), "Littering as a Function of Prior Litter and the Presence or Absence of Prohibitive Signs," *Journal of Applied Social Psychology*, 10:45–55. E. Scott Geller, Jill F. Witmer, and Margaret A. Tuso (1977), "Environmental Interventions for Litter Control," *Journal of Applied Psychology*, 62:344–51.

[seeing someone](#) Harold Grasmick, Robert Bursik, and Karyl Kinsey (1991), "Shame and Embarrassment as Deterrents to Noncompliance with the Law: The Case of an Antilittering Campaign," *Environment & Behavior*, 23:233–51. Carl A. Kallgren, Raymond R. Reno, and Robert B. Cialdini (2000), "A Focus Theory of Normative Conduct: When Norms Do and Do Not Affect Behavior," *Personality & Social Psychology Bulletin*, 26:1002–12.

[general breakdown](#) James B. Stewart (2011), *Tangled Webs: How False Statements Are Undermining America: From Martha Stewart to Bernie Madoff*, Penguin Press.

[unpunished free rider](#) Robert O. Kurzban and Daniel Houser (2001), "Individual Differences in Cooperation in a Circular Public Goods Game," *European Journal of Personality*, 15:S37–S52. David P. Myatt and Chris Wallace (2008), "When Does One Bad Apple Spoil the Barrel? An Evolutionary Analysis of Collective Action," *Review of Economic Studies*, 75:499–527.

[In Islam](#) Sahih Muslim, Book 037, Hadith Number 6658.

[propaganda campaigns](#) David Livingstone Smith (2011), *Less than Human: Why We Demean, Enslave, and Exterminate Others*, St. Martin's Press.

[failure or absence](#) Simon Baron-Cohen (2011), *Zero Degrees of Empathy: A New Theory of Human Cruelty*, Penguin/Allen Lane; published in the U.S. as *The Science of Evil: On Empathy and the Origins of Human Cruelty*, Basic Books.

[food on the honor](#) Stephen J. Dubner and Steven D. Levitt (6 Jun 2004), "What the Bagel Man Saw: An Accidental Glimpse at Human Nature," *New York Times Magazine*, 62–5.

[follow social norms](#) Daniel Kahneman and Dale T. Miller (1986), "Norm Theory: Comparing Reality to Its Alternatives," *Psychological Review*, 93:136–53. Cass R. Sunstein (1996), "Social Norms and Social Roles," *Columbia Law Review*, 96:903–68. Helen Bernhard, Ernst Fehr, and Urs Fischbacher (2006), "Group Affiliation and Altruistic Norm Enforcement," *American Economic Review*, 96:217–21.

[Emmanuel Levinas](#) Michael L. Morgan (2011), *The Cambridge Introduction to Emmanuel Levinas*, Cambridge University Press.

[people turned in](#) Akiko Fujita (17 Aug 2011), "Honest Japanese Return \$78 Million in Cash Found in Quake Rubble," ABC News.

[practice of religion](#) David Kowalewski (1980), "Protest for Religious Rights in the USSR: Characteristics and Consequences," *Russian Review*, 39:426–41. Sabrina Petra Ramet, ed. (1993), *Religious Policy in the Soviet Union*, Cambridge University Press.

[Confidence tricksters](#) Frank Stajano and Paul Wilson (Mar 2011), "Understanding Scam Victims: Seven Principles for Systems Security," *Communications of the ACM*, 54:70–5.

[we have trouble](#) David McCullough (2003), *Truman*, Simon & Schuster, 510.

## Chapter 8

[ability to deceive](#) David Livingstone Smith (2004), *Why We Lie: The Evolutionary Roots of Deception and the Unconscious Mind*, St. Martin's Press.

[Wason Selection Task](#) Peter C. Wason (1966), "Reasoning," in B.M. Foss, *New Horizons in Psychology*, Penguin. Peter C. Wason and Diana Shapiro (1971), "Natural and Contrived Experience in a Reasoning Problem," *Quarterly Journal of Experimental Psychology*, 23:63–71.

[better at solving](#) Leda Cosmides (1989), "The Logic of Social Exchange: Has Natural Selection Shaped How Humans Reason? Studies with the Wason Selection Task," *Cognition*, 31:187–276.

[scans of the brains](#) Nicola Canessa, Alessandra Gorini, Stefano F. Cappa, Massimo Piattelli-Palmarini, Massimo Danna, Ferruccio Fazio, and Daniela Perani (2005), "The Effect of Social Context on Deductive Reasoning: An fMRI Study," *Human Brain Mapping*, 26:30–43.

[we cooperate primarily](#) Natalie Henrich and Joseph Henrich (2007), "Evolutionary Theory and the Social Psychology of Human Cooperation," in Joseph Henrich and Natalie Henrich, eds., *Why Humans Cooperate: A Cultural and Evolutionary Explanation*, Oxford University Press: 35–74. Robert Boyd and Peter J. Richerson (1992), "Punishment Allows the Evolution of Cooperation (or Anything Else) in Sizable Groups," *Ethology & Sociobiology*, 13:171–95.

[reputation information](#) Paul Resnick, Ko Kuwabara, Richard Zeckhauser, and Eric Friedman (2000), "Reputation Systems," *Communications of the ACM*, 43:45–8. Daniel Houser and John Wooders (2006), "Reputation in Auctions:



Theory, and Evidence from eBay,” *Journal of Economics & Management Strategy*, 15:353–69. Paul Resnick, Richard Zeckhauser, John Swanson, and Kate Lockwood (2006), “The Value of Reputation on eBay: A Controlled Experiment,” *Experimental Economics*, 9:79–101. Jian Yang, Xiaorhi Hu, and Han Zhang (2007), “Effects of a Reputation Feedback System on an Online Consumer-to-Consumer Auction Market,” *Decision Support Systems*, 44:93–105.

[eBay changed this](#) Max Sherry (30 Oct 2008), “eBay Feedback System Negative for Sellers,” suite101.com. Greg Kusch (8 Jan 2010), “Leaving Buyer Feedback on eBay (I’ll Scratch Your Back. Will You Scratch Mine?),” Ezinearticles.com.

[remember negative](#) Felicia Pratto and Oliver P. John (1991), “Automatic Vigilance: The Attention-Grabbing Power of Negative Social Information,” *Journal of Personality & Social Psychology*, 61:380–91. Roy F. Baumeister, Ellen Bratslavsky, Catrin Finkenauer, and Kathleen D. Vohs (2001), “Bad Is Stronger Than Good,” *Review of General Psychology*, 5:323–70. Tiffany A. Ito, Jeff T. Larsen, N. Kyle Smith, and John T. Cacioppo (1998), “Negative Information Weighs More Heavily on the Brain: The Negativity Bias in Evaluative Categorizations,” *Journal of Personality & Social Psychology*, 75:887–900. Elizabeth A. Kensinger (2007), “Negative Emotion Enhances Memory Accuracy: Behavioral and Neuroimaging Evidence,” *Current Directions in Psychological Science*, 16:213–18.

[theory that gossip](#) Peter J. Wilson (1974), “Filcher of Good Names: An Enquiry Into Anthropology and Gossip,” *Man, New Series*, 9:93–102. Ronald S. Burt and Mark Knez (1995), “Kinds of Third-Party Effects on Trust,” *Rationality & Society*, 7:255–92. Ralf D. Sommerfeld, Hans-Jurgen Krambeck, Dirk Semmann, and Manfred Milinski (2007), “Gossip as an Alternative for Direct Observation in Games of Indirect Reciprocity,” *Proceedings of the National Academy of Sciences of the United States of America*, 104:17435–40. Robin I.M. Dunbar (22 Nov 1992), “Why Gossip Is Good for You,” *New Scientist*, 28–31. Robin I.M. Dunbar (1996), *Grooming, Gossip and the Evolution of Language*, Harvard University Press.

[whom to interact](#) Robin I.M. Dunbar (2004), “Gossip in Evolutionary Perspective,” *Review of General Psychology*, 8:100–10. Ralf D. Sommerfeld, Hans-Jurgen Krambeck, Dirk Semmann, and Manfred Milinski (2007), “Gossip as an Alternative for Direct Observation in Games of Indirect Reciprocity,” *Proceedings of the National Academy of Sciences of the United States of America*, 104:17435–40.

[establish group interests](#) Richard H. McAdams (1997), “The Origin, Development, and Regulation of Norms,” *Michigan Law Review*, 96:338–433. Roy F. Baumeister, Liqing Zhang, and Kathleen D. Vohs (2004), “Gossip as Cultural Learning,” *Review of General Psychology*, 8:111–21.

[gossip helps keep](#) Richard McAdams (1996), “Group Norms, Gossip, and Blackmail,” *University of Pennsylvania Law Review*, 144:2237–92. Dirk Semmann, Hans-Jürgen Krambeck, and Manfred Milinski (2005), “Reputation Is Valuable Within and Outside One’s Own Social Group,” *Behavioral Ecology & Sociobiology*, 57:611–6. Bianca Beersma and Gerben A. Van Kleef (2011), “How the Grapevine Keeps You in Line: Gossip Increases Contributions to the Group,” *Social Psychological & Personality Science*, 2:642–9.

[Diamond merchants](#) Barak D. Richman (2002), “Community Enforcement of Informal Contracts: Jewish Diamond Merchants in New York,” Harvard Law School John M. Olin Center for Law, Economics and Business Discussion Paper Series, Paper 384.

[a pair of eyes](#) Melissa Bateson, Daniel Nettle, and Gilbert Roberts (2006), “Cues of Being Watched Enhance Cooperation in a Real-World Setting,” *Biology Letters*, 2:212–4.

[names and addresses](#) Arthur L. Beaman, Bonnel Kentz, Edward Diener, and Soren Svanum (1979), “Self-Awareness and Transgression in Children: Two Field Studies,” *Journal of Personality & Social Psychology*, 37:1835–46.

[There’s a great word](#) Oliver Conway (22 Jun 2004), “Congo Word ‘Most Untranslatable,’” *BBC News*.

[Quakers would cooperate](#) Adrian Cadbury (2003), “Beliefs and Business: The Experience of Quaker Companies,” The Foundation of Lady Katherine Leveson. James Surowiecki (2004), *The Wisdom of Crowds*, Anchor. Steven Davison (2011), “The Double-Culture Period: Factors in Quaker Success,” unpublished manuscript.

[Maghribi traders](#) Avner Greif (2008), “Contract Enforcement and Institutions among the Maghribi Traders: Refuting Edwards and Ogilvie,” SIEPR Discussion Paper 08–018, Stanford Institute for Economic Policy Research.

[Robert Putnam](#) Robert Putnam (2007), “*E Pluribus Unum*: Diversity and Community in the Twenty-First Century,” *Scandinavian Political Studies*, 30:137–74. Robert Putnam (2001), *Bowling Alone: The Collapse and Revival of American Community*, Touchstone/Simon & Schuster.

[vestigial remnants](#) David Sally (2000), “A General Theory of Sympathy, Mind-Reading, and Social Interaction, with an Application to the Prisoners’ Dilemma,” *Social Science Information*, 39:567–643.

[people who look like](#) Lisa M. DeBruine (2004), “Facial Resemblance Increases the Attractiveness of Same-Sex Faces More Than Other-Sex Faces,” *Proceedings of the Royal Society B: Biological Sciences*, 271:2085–90. Lisa M. DeBruine (2005), “Trustworthy but Not Lust-Worthy: Context-Specific Effects of Facial Resemblance,” *Proceedings of the Royal Society B: Biological Sciences*, 272:919–22. Lisa M. DeBruine, Benedict C. Jones, Anthony C. Little, and David I. Perrett (2008), “Social Perception of Facial Resemblance in Humans,” *Archives of Sexual Behavior*, 27:64–77. Alexandra Alvergne, Elise Huchard, Damien Caillaud, Marie J. E. Charpentier, Joanna M. Setchell, Charlène Ruppli, Delphine Féjan, Laura Martinez, Guy Cowlishaw, and Michel Raymond (2009), “Human Ability to Recognize Kin Visually Within Primates,” *International Journal of Primatology*, 30:199–210.

[same accent](#) Shirley Lev-Ari and Boaz Keysar (2010), “Why Don’t We Believe Non-Native Speakers? The

Influence of Accent on Credibility," *Journal of Experimental Social Psychology*, 46:1093–6.

[change our patterns](#) Tanya L. Chartrand and John A. Bargh (1999), "The Chameleon Effect: The Perception-Behavior Link and Social Interaction," *Journal of Personality & Social Psychology*, 76:893–910. Jessica L. Lakin, Valerie E. Jefferis, Clara Michelle Cheng, and Tanya L. Chartrand (2003), "The Chameleon Effect As Social Glue: Evidence for the Evolutionary Significance of Nonconscious Mimicry," *Journal of Nonverbal Behavior*, 27:145–62. Tanya L. Chartrand and Rick van Baaren (2009), "Human Mimicry," *Advances in Experimental Social Psychology*, 41:219–74.

[don't sound like](#) John Baugh (2010), "Linguistic Profiling," in Sifree Makoni, Geneva Smitherman, and Arnetha Ball, eds., *Black Linguistics*, Routledge. Shiri Lev-Ari and Boaz Keysar (2010), "Why Don't We Believe Non-Native Speakers? The Influence of Accent on Credibility," *Journal of Experimental Social Psychology*, 46:1093–96.

[how to cooperate](#) Ernst Fehr and Urs Fischbacher (2004), "Social Norms and Human Cooperation," *Trends in Cognitive Sciences*, 8:185–90.

[Platinum Rule](#) Tony Alessandra and Michael J. O'Connor (1996), *The Platinum Rule: Discover the Four Basic Business Personalities—And How They Can Lead You to Success*, Warner Books.

[reputation scale](#) Avinash Dixit and Barry Nalebuff (1991), *Thinking Strategically: The Competitive Edge in Business, Politics, and Everyday Life*, Norton, 144–61.

[Criminals have signals](#) Diego Gambetta (2009), *Codes of the Underworld: How Criminals Communicate*, Princeton University Press.

[Shared brand names](#) Jean Tirole (1996), "A Theory of Collective Reputations (with Applications to the Persistence of Corruption and to Firm Quality)," *Review of Economic Studies*, 63:1–22.

[Saudi Binladin Group](#) Holly Williams (20 Nov 2001), "Bin Laden Group Reputation Brief on Global Scale," *PR Week UK*.

[pay a premium](#) Stefano Castriota and Marco Delmastro (2009), "The Economics of Collective Reputation: Minimum Quality Standards, Vertical Differentiation, and Optimal Group Size," American Association of Wine Economists Working Paper 50.

[more reputable producer](#) Stuart Landon and Constance E. Smith (1998), "Quality Expectations, Reputation, and Price," *Southern Economic Journal*, 64:628–47. Olivier Gergaud and Florine Livat (2004), "Team versus Individual Reputations: A Model of Interaction and Some Empirical Evidence," *Cahiers de la Maison des Sciences Economiques*, No. bla04015.

[cultivate their brand](#) Smooch Reynolds (Dec 2002), "Career Branding: Is There Really Such a Concept?" *Public Relations Tactics*, 9:7,22.

[A small complaint](#) Daniel J. Solove (2007), *The Future of Reputation: Gossip, Rumor, and Privacy on the Internet*, Yale University Press.

[isn't an effective](#) Daniel Balliet, Laetitia B. Mulder, and Paul A.M. Van Lange (2011), "Reward, Punishment, and Cooperation: A Meta-Analysis," *Psychological Bulletin*, 137:594–615.

[Maine lobstermen](#) James M. Acheson (Apr 1972), "Territories of the Lobstermen," *Natural History Magazine*, 81 (4): 60–9.

[Shame is a common](#) Thomas J. Scheff (2000), "Shame and the Social Bond: A Sociological Theory," *Sociological Theory*, 18:84–99.

[excessive CEO pay](#) Sandeep Gopalan (2007), "Shame Sanctions and Excessive CEO Pay," *Delaware Journal of Corporate Law*, 32:757–97.

[Informal punishments](#) Marc Galanter and David Luban (1993), "Poetic Justice: Punitive Damages and Legal Pluralism," *The American University Law Review*, 42:1393–1463.

[bad apples diminishes](#) Jaap W. Ouwerkerk, Paul A.M. van Lange, Marcello Gallucci, and Norbert L. Kerr (2004), "Avoiding the Social Death Penalty: Ostracism and Cooperation in Social Dilemmas," Presentation at the 7th Annual Sydney Symposium of Social Psychology: "The Social Outcast: Ostracism, Social Exclusion, Rejection, and Bullying," 15–18 Mar, 2004. Norbert L. Kerr, Ann C. Rumble, Ernest S. Park, Jaap W. Ourwerkerk, Craig D. Parks, Marcello Gallucci, and Paul A.M. van Lange (2009), "'How Many Bad Apples Does It Take to Spoil the Whole Barrel?' Social Exclusion and Toleration for Bad Apples," *Journal of Experimental Social Psychology*, 45:603–13.

[if Alice kills Bob](#) Napoleon A. Chagnon (1988), "Life Histories, Blood Revenge, and Warfare in a Tribal Population," *Science, New Series*, 239:985–92. Jon Elster (1990), "Norms of Revenge," *Ethics*, 100:862–85.

[Nazis instituted this](#) Robert Loeffel (2007), "Sippenhaft, Terror and Fear in Nazi Germany: Examining One Facet of Terror in the Aftermath of the Plot of 20 July 1944," *Contemporary European History*, 16:51–69.

[various cultures](#) Jon Elster (1990), "Norms of Revenge," *Ethics*, 100:862–85. Stephen D. White (1986), "Feuding and Peace-Making in the Touraine Around the Year 1100," *Traditio*, 42:195–263. Trevor Dean (1997), "Marriage and Mutilation: Vendetta in Late Medieval Italy," *Past & Present*, 157:3–36. Joel T. Rosenthal (1966), "Marriage and the Blood Feud in 'Heroic' Europe," *The British Journal of Sociology*, 17:133–44.

[Hatfields versus the McCoys](#) Otis K. Rice (1982), *The Hatfields and McCoys*, University of Kentucky Press.

[reputation can solve](#) Brian Skyrms (1996), *The Evolution of the Social Contract*, Cambridge University Press, 56–8.

[John Wayne Gacy](#) Clifford L. Linedecker (1980), *The Man Who Killed Boys: A True Story of Mass Murder in a Chicago Suburb*, St. Martin's Press.

[Dr. Harold Shipman](#) Sarah Ramsay (2001), "Audit Further Exposes UK's Worst Serial Killer," *Lancet*, 357:123–4.

[settling disputes](#) Robert C. Ellickson (1991), *Order without Law: How Neighbors Settle Disputes*, Harvard University Press.

[Dunbar wrote](#) Robin I.M. Dunbar (Nov 1992), "Why Gossip Is Good For You," *New Scientist*, 28–31.

[Hardin: "Perhaps"](#) Garrett Hardin (1994), "The Tragedy of the Unmanaged Commons," *Trends in Ecology & Evolution*, 9:199.

## Chapter 9

[continuous operation clause](#) Marc C. Singer (2005), "'Going Dark' Provisions: Making Clients See the Light," *New Jersey Law Journal*, 179:1–3.

[solitary, poor, nasty](#) Thomas Hobbes (1651), *Leviathan*, Printed for Andrew Crooke, at the Green Dragon in St. Paul's Churchyard.

[Martin Luther said](#) Martin Luther (1524), *Von Kaufshandlung und Wucher*.

[Immanuel Kant](#) Immanuel Kant (1795), *First Supplement on the Guarantee for Perpetual Peace*.

[John Locke](#) John Locke (1689), *Second Treatise of Government*.

Jean-Jacques Rousseau Jean-Jacques Rousseau (1762), *Du Contrat Social (The Social Contract)*.

[John Rawls](#) John Rawls (1971), *A Theory of Justice*, Belknap Press of Harvard University Press.

[In Plato's Republic](#) Plato (c. 427–347 BC), *The Republic*.

[Niccolò Machiavelli](#) Niccolò Machiavelli (1517), *Discourses Upon the First Ten Books of Titus Livy*.

[Garrett Hardin](#) Garrett Hardin (1994). "The Tragedy of the Unmanaged Commons," *Trends in Ecology & Evolution*, 9:199.

[voting is required](#) Elliot Frankal (4 Jul 2005), "Compulsory Voting Around the World," *The Guardian*.

[marriage rites were informal](#) Stephanie Coontz (2005), *Marriage, a History: From Obedience to Intimacy, or How Love Conquered Marriage*, Viking.

[accomplices at worst](#) Marla Dickerson and Cecilia Sanchez (5 Aug 2008), "Mexican Police Linked to Rising Kidnappings," *Los Angeles Times*.

[occasionally jails](#) British Broadcasting Corporation (20 June 2011), "Somalia: Six Jailed for 'Pirate Ransom' Case," *BBC News*.

[offering a bribe](#) Kaushik Basu (2011), "Why, for a Class of Bribes, the Act of Giving a Bribe Should Be Treated as Legal," Working Paper 1-2011-DEA, Ministry of Finance, Government of India.

[easy to make exceptions](#) Ed Moloney (2002), *A Secret History of the IRA*, Viking Penguin.

[Alexander Hamilton](#) Alexander Hamilton (1787), "The Federalist #15," in Alexander Hamilton, John Jay and James Madison; John C. Hamilton, ed. (1866), *The Federalist: A Commentary On the Constitution of the United States*, Lippincott, 143.

[immoral, ineffective](#) Toni M. Massaro (1991), "Shame, Culture, and American Criminal Law," *Michigan Law Review*, 89:1880–1944. James Q. Whitman (1998), "What Is Wrong with Inflicting Shame Sanctions?" *The Yale Law Journal*, 107:1055–92. Brian Netter (2005), "Avoiding the Shameful Backlash: Social Repercussions for the Increased Use of Alternative Sanctions," *The Journal of Criminal Law & Criminology*, 96:187–216. Dan M. Kahan (2006), "What's Really Wrong with Shaming Sanctions," *Texas Law Review*, 84:2075–95.

[fines reduce speeding](#) Robert Beattie Crawford (1989), "Toward a Theory on Speeding and Penalties: Have the Increased Fines Reduced Speeding in Massachusetts?" Master's thesis, Massachusetts Institute of Technology. D.C. Webster and P.A. Wells (2000), "The Characteristics of Speeders," Road Safety Division, Department of the Environment, Transport and the Regions, TRL Report. Saranath Lawpoolsri, Jingyi Li, and Elisa R. Braver (2007), "Do Speeding Tickets Reduce the Likelihood of Receiving Subsequent Speeding Tickets? A Longitudinal Study of Speeding Violators in Maryland," *Traffic Injury Prevention*, 8:26–34.

[uninsured drivers](#) Ray Massey (23 Nov 2010), "Uninsured Drivers Kill 160 People a Year but Face Inadequate Fines as Low as £50," *Daily Mail*.

[basing traffic fines](#) British Broadcasting Corporation (14 Jan 2002), "Nokia Boss Gets Record Speeding Fine," *BBC News*. British Broadcasting Corporation (10 Feb 2004), "Finn's Speed Fine Is a Bit Rich," *BBC News*. Jason Paur (8 Jan 2010), "Swiss Slap Speeder With \$290K Fine," *Wired*. British Broadcasting Corporation (12 Aug 2010), "Swede Faces World-Record \$1m Speeding Penalty," *BBC News*.

[tax the use of antibiotics](#) Infectious Diseases Society of America (2011), "Combating Antimicrobial Resistance: Policy Recommendations to Save Lives," *Clinical Infectious Diseases*, 52 (suppl. 5): S397–428.

[In one experiment](#) Ann E. Tenbrunsel and David M. Messick (1999), "Sanctioning Systems: Decision Frames and Cooperation," *Administrative Science Quarterly*, 44:684–707.



[instituted a fine](#) Uri Gneezy and Aldo Rustichini (2000), "A Fine is a Price," *Journal of Legal Studies*, 29:1–17.

[towns are experimenting](#) Ben Hamilton-Baillie (2004), "Urban Design: Why Don't We Do It In The Road? Modifying Traffic Behavior Through Legible Urban Design," *Journal of Urban Technology*, 11:43–6. Peter Peters (2005), "Exchanging Travel Speed: Time Politics in Mobility Practices," *Configurations*, 13:395–419,436. Tom Vanderbilt (Summer 2008), "The Traffic Guru," *The Wilson Quarterly*, 26–32.

[incident in Switzerland](#) Bruno S. Fray and Felix Oberholzer-Gee (1997), "The Cost of Price Incentives: An Empirical Analysis of Motivation Crowding-Out," *American Economic Review*, 87:746–55.

[gave different weights](#) Don A. More, Lloyd Tantu, and Max H. Bazerman (2010), "Conflict of Interest and the Intrusion of Bias," *Judgment & Decision Making*, 5:37–53.

[require advisors](#) Daylian M. Cain, George Loewenstein, and Don A. More (2005), "The Dirt on Coming Clean: Perverse Effects of Disclosing Conflict of Interest," *The Journal of Legal Studies*, 34:1–25.

[able to self-regulate](#) Fikret Berkes, David Feeny, Bonnie J. McCay, and James M. Acheson (1989), "The Benefits of the Commons," *Nature*, 340:91–3. David Feeny, Fikret Berkes, Bonnie J. McCay, and James M. Acheson (1990), "The Tragedy of the Commons: Twenty-Two Years Later," *Human Ecology*, 18:1–19. Carl J. Dahlman (1992), "The Tragedy of the Commons that Wasn't: On Technical Solutions to the Institutions Game," *Population & Environment*, 12:285–96. Elinor Ostrom, Joanna Burger, Christopher B. Field, Richard B. Norgaard, and David Policansky (1999), "Revisiting the Commons: Local Lessons, Global Challenges," *Science*, 284:278–82.

[outsiders come in](#) Mansel G. Blackford (2009), "Fishers, Fishing, and Overfishing: American Experiences in Global Perspective, 1976–2006," *Business History Review*, 83:239–66.

[The scarlet letter](#) George Elliott Howard (1904), *A History of Matrimonial Institutions: Chiefly in England and the United States, with an Introductory Analysis of the Literature and the Theories of Primitive Marriage and the Family*, Fred B. Rothman & Co., 169–78.

[existential threat](#) John Mueller and Mark G. Stewart (2 Apr 2010), "Hardly Existential: Thinking Rationally About Terrorism," *Foreign Affairs*.

[death penalty reduces](#) Hashem Dezhbakhsh, Paul H. Rubin, and Joanna M. Shepherd (2003), "Does Capital Punishment Have a Deterrent Effect? New Evidence from Post-moratorium Panel Data," *American Law & Economics Review*, 5:344–76. Paul R. Zimmerman (2004), "State Executions, Deterrence, and the Incidence of Murder," *Journal of Applied Economics*, 7:163–93. Naci Mocan and Kaj Gittings (2010), "The Impact of Incentives on Human Behavior: Can We Make it Disappear? The Case of the Death Penalty," in Rafael Di Tella, Sebastian Edwards, and Ernesto Schargrodsy, eds., *The Economics of Crime: Lessons for and from Latin America*, University of Chicago Press. Steven S. Cuellar and Kyle Buehring (2010), "Does Capital Punishment Have a Deterrence Effect on the Murder Rate? Issues and Evidence," Sonoma State University.

[demonstrate it doesn't](#) Jeffrey Fagan (2005), "Deterrence and the Death Penalty: A Critical Review of New Evidence," Testimony to the New York State Assembly Standing Committee on Codes, Assembly Standing Committee on Judiciary and Assembly Standing Committee on Correction, Hearings on the Future of Capital Punishment in the State of New York, Jan 21, 2005. John J. Donahue and Justin Wolfers (2005), "Uses and Abuses of Empirical Evidence in the Death Penalty Debate," *Stanford Law Review*, 58:791–845. John J. Donahue and Justin Wolfers (2009), "Estimating the Impact of the Death Penalty on Murder," *American Law & Economics Review*, 11:249–309. Michael Radelet and Traci Lacock (2009), "Do Executions Lower Homicide Rates? The Views of Leading Criminologists," *The Journal of Criminal Law & Criminology*, 99:489–508.

[probability of punishment](#) Gary S. Becker (1968), "Crime and Punishment: An Economic Approach," *Journal of Political Economy*, 76:169–217. Jeffrey Grogger (1991), "Certainty vs. Severity of Punishment," *Economic Inquiry*, 29:297–309. Lixuan Zhang, Wayne W. Smith, and William C. McDowell (2009), "Examining Digital Piracy: Self-Control, Punishment, and Self-Efficacy," *Information Resources Management Journal*, 22:24–44.

[societal causes of crime](#) Peter W. English and Bruce D. Sales (2005), *More Than the Law: Behavioral and Social Facts in Legal Decision Making*, American Psychological Association.

[Laws can have loopholes](#) Saul Levmore (2010), "Ambiguous Statutes," *The University of Chicago Law Review*, 77:1073–89.

[Google pays](#) Jesse Drucker (21 Oct 2010), "Google 2.4% Rate Shows how \$60 Billion Lost to Tax Loopholes," Bloomberg.

[large paper mills](#) Steven Mufson (28 Mar 2009), "Papermakers Dig Deep in Highway Bill To Hit Gold," *The Washington Post*. Jad Mouawad and Clifford Krauss (19 Apr 2009), "Lawmakers May Limit Paper Mills' Windfall," *New York Times*. *Wall Street Journal* (30 Jun 2009), "The Black Liquor War."

[video games](#) David Kochieniewski (10 Sep 2011), "Rich Tax Breaks Bolster Makers of Video Games," *New York Times*.

[Japan exploits](#) Eldon V.C. Greenberg, Paul S. Hoff, and Michael I. Goulding (2002), "Japan's Whale Research Program and International Law," *California Western International Law Journal*, 32:151–209. Reuben B. Ackerman (2002), "Japanese Whaling in the Pacific Ocean: Defiance of International Whaling Norms in the Name of 'Scientific Research,' Culture, and Tradition," *Boston College International & Comparative Law Review*, 323–42.

[Law of the Sea](#) Marcos A. Orellana (2004), "The Law on Highly Migratory Fish Stocks: ITLOS Jurisprudence in Context," *Golden Gate University Law Review*, 34:459–95.



[Security Council Resolution 1441](#) Michael Byers (2004), "Agreeing to Disagree: Security Council Resolution 1441 and Intentional Ambiguity," *Global Governance*, 10:165–86.

[Judge Gordon Hewart](#) Gordon Hewart (1923), *Rex v. Sussex Justices, Ex parte McCarthy*, King's Bench Division, *All England Law Reports*: 233.

[Invasive species](#) Jason Van Driesche and Roy Van Driesche (2000), *Nature Out of Place: Biological Invasions in the Global Age*, Island Press.

[ecological disaster](#) Daniel Simberloff (2001) "Biological Invasions: How Are They Affecting Us, and What Can We Do About Them?" *Western North American Naturalist*, 61:308–15.

[silver carp](#) M. Freeze and S. Henderson (1982) "Distribution and Status of the Bighead Carp and Silver Carp in Arkansas," *North American Journal of Fisheries Management*, 2:197–200.

[pregnant brown tree snake](#) Thomas H. Fritts and Gordon H. Rodda (1998), "The Role of Introduced Species in the Degradation of Island Ecosystems: A Cade History of Guam," *Annual Review of Ecology & Systematics*, 29:113–40.

[zebra mussel larvae](#) David L. Strayer (2010), "Alien Species in Fresh Waters: Ecological Effects, Interactions With Other Stressors, and Prospects for the Future," *Freshwater Biology*, 55:152–74.

[Monk parakeets](#) Michael A. Russello, Michael L. Avery, and Timothy F. Wright (2008), "Genetic Evidence Links Invasive Monk Parakeet Populations in the United States to the International Pet Trade," *BMC Evolutionary Biology*, 8:217.

[crop damage](#) Eric A. Tillman (2000), "Bird Damage to Tropical Fruit in South Florida," *The Ninth Wildlife Damage Management Conference Proceedings*.

[also cause fires](#) Michael L. Avery (2002), "Monk Parakeet Management at Electric Utility Facilities in South Florida," Internet Center for Wildlife Damage Management, USDA National Wildlife Research Center Staff Publications. Dan Mangan and Erin Calabrese (21 Apr 2009), "Fowl Play in Qns.: Blackout Parrots' Nests Cut Electricity," *New York Post*.

[state laws vary wildly](#) Michael A. Russello, Michael L. Avery, and Timothy F. Wright (2008), "Genetic Evidence Links Invasive Monk Parakeet Populations in the United States to the International Pet Trade," *BMC Evolutionary Biology*, 8:217.

## Chapter 10

[making towels souvenirs](#) Lynn Yaeger (2 Jun 2009), "Stealing Hotel Amenities: Right or Wrong?" *MSNBC*.

[reduced towel theft](#) Sara J. Welch (2011), "Gee, How Did That Towel End Up in My Suitcase," *New York Times* blog.

[patterns of fraud](#) Yufeng Kou, Chang-Tien Lu, Sirirat Sirwongwattana, and Yo-Ping Huang (2004), "Survey of Fraud Detection Techniques," *IEEE International Conference on Networking, Sensing and Control*, vol. 2, 749–54. Jon T.S. Quah and M. Sriganesh (2008), "Real-Time Credit Card Fraud Detection Using Computational Intelligence," *Expert Systems with Applications*, 35:1721–32. Edwin Raj Benson and A. Annie Portia (2011), "Analysis on Credit Card Fraud Detection Methods," *2011 International Conference on Computer, Communication and Electrical Technology*, 152–6. Arturo Elias, Alberto Ochoa-Zezzatti, Alejandro Padilla, and Julio Ponce (2011), "Outlier Analysis for Plastic Card Fraud Detection: A Hybridized and Multi-Objective Approach," *Hybrid Artificial Intelligence Systems, Lecture Notes in Computer Science*, Springer-Verlag, 6679:1–9. Amlan Kundu, Shamik Sural, and Arun K. Majumdar (2006), "Two-Stage Credit Card Fraud Detection Using Sequence Alignment," *Information Systems Security, Lecture Notes in Computer Science*, Springer-Verlag, 4332:260–75.

[predictive policing programs](#) Martin B. Short, Maria R. D'Orsogna, Virginia B. Pasour, George E. Tita, P. Jeffrey Brantingham, Andrea L. Bertozzi, and Lincoln B. Chayes (2008), "A Statistical Model of Criminal Behavior," *Mathematical Models and Methods in Applied Sciences*, 18 (Supplement):1249–67. Beth Pearsall (2010), "Predictive Policing: The Future of Law Enforcement?" *NIJ Journal*, 266:16–9. Nancy Murray (2011), "Profiling in the Age of Total Information Awareness," *Race & Class*, 51:3–24.

[Timothy McVeigh's van](#) Associated Press (28 Sep 2009), "Attorney: Oklahoma City Bombing Tapes Appear Edited," *Oklahoman*.

[reduce car theft](#) Ian Ayres and Steven Levitt (1998), "Measuring Positive Externalities from Unobservable Victim Precaution: An Empirical Analysis of Lojack," *Quarterly Journal of Economics*, 113:43–77. Marco Gonzalez-Navarro (2008), "Deterrence and Displacement in Auto Theft," Center for Economic Policy Studies Working Paper.

[confidence in vaccines](#) Heidi Larson, Louis Z. Cooper, Juhani Eskola, Samuel L. Katz, and Scott Ratzan (6 Aug 2011), "Addressing the Vaccine Confidence Gap," *The Lancet*, 378:526–35.

[new version of Monopoly](#) Stephanie Clifford (16 Feb 2011), "No Dice, No Money, No Cheating. Are You Sure This is Monopoly?" *New York Times*.

*Crime Prevention Techniques* Ronald V. Clarke and John Eck (2003), *Become a Problem Solving Crime Analyst*, Willan Publishing. Derek B. Cornish and Ronald V. Clarke (2003) "Opportunities, Precipitators and Criminal Decisions," in *Theory for Practice in Situational Crime Prevention, Crime Prevention Studies, Vol. 16*, Criminal Justice Press.

[enforcing anti-doping](#) David R. Mottram, ed. (2011), *Drugs in Sport, Fifth Edition*, Taylor & Francis.

[Alex Zülle](#) John Hoberman (20 Sep 2007), "Dopers on Wheels: The Tour's Sorry History," MSNBC.

[almost a third](#) Patrick Mignon (2003), "The Tour de France and the Doping Issue," *International Journal of the History of Sport*, 20:227–45.

[never intended](#) Jamey Keaten (20 Jul 2007), "At Tour de France, Asthma Inhalers Can Be a Rider's Best Friend," *USA Today*.

[stripped of her gold medal](#) *Sports Illustrated* (28 Sep 2000), "Arbitrators Uphold Decision to Strip Raducan of Gold," CNN.

[install security cameras](#) Bruce Schneier (26 Jun 2008), "CCTV Doesn't Keep Us Safe, Yet the Cameras Are Everywhere," *The Guardian*.

[full-body scanners](#) Bruce Schneier (2 Dec 2010), "Why the TSA Can't Back Down," *The Atlantic*.

[military spends billions](#) New York Times (2 Oct 1984), "A Lemon the Size of the Pentagon," *New York Times*. Michael Ditton (Aug 1988), "The DIVAD Procurement: A Weapon System Case Study," *The Army Lawyer*, 3–9. Irene Willhite (Mar 2002), "40-mm Division Air Defense Gun: DIVAD (Sgt. York)," *Cold War Times*, 15–22.

[better slugs](#) Ronald V. Clarke, Ronald P. Cody, and Mangai Natarajan (1994), "Subway Slugs: Tracking Displacement on the London Underground," *British Journal of Criminology*, 34:122–38.

[door locks and safes](#) Mark Weber Thomas (2000), *Locks, Safes and Security*, Second Edition, Charles Thomas Publisher, Ltd. Matt Blaze (2003), "Cryptology and Physical Security: Rights Amplification in Master-Keyed Mechanical Locks," IEEE Security and Privacy. Matt Blaze (2004), "Safecracking for the Computer Scientist," U. Penn CIS Department Technical Report.

[fax machines](#) Bruce Schneier (29 May 2008), "Why Do We Accept Signatures by Fax?" *Wired News*.

[Electronic voting machines](#) Ariel J. Feldman, J. Alex Halderman, and Edward W. Felten (2006), "Security Analysis of the Diebold AccuVote-TS Voting Machine," Center for Information Technology Policy, Princeton University. Adam Aviv, Pavol Cerny, Sandy Clark, Eric Cronin, Gaurav Shah, Micah Sherr, and Matt Blaze (2008), "Security Evaluation of ES&S Voting Machines and Election Management System," USENIX/ACCURATE Electronic Voting Technology Workshop (EVT '08), paper presented at "USENIX/ACCURATE. Hari K. Prasad, J. Alex Halderman, Rop Gonggrijp, Scott Wolchok, Eric Wustrow, Arun Kankipati, Sai Krishna Sakhamuri, and Vasavya Yagati (2010), "Security Analysis of India's Electronic Voting Machines," *Proceedings of the 17th ACM Conference on Computer and Communications Security*, Association of Computing Machinery. Doug Jones and Barbara Simons (2012), *Broken Ballots: Will Your Vote Count in the Electronic Age?* CSLI Publications.

[electronics in cars](#) Stephen Checkoway, Damon McCoy, Brian Kantor, Danny Anderson, Hovav Shacham, Stefan Savage, Karl Koscher, Alexei Czeskis, Franziska Roesner, and Tadayoshi Kohno (2011), "Comprehensive Experimental Analyses of Automotive Attack Surfaces," USENIX Security.

[Networked medical devices](#) William H. Maisel and Tadayoshi Kohno (2010), "Improving the Security and Privacy of Implantable Medical Devices," *New England Journal of Medicine*, 362:1164–6.

[cursive is not being taught](#) Katie Zezima (28 Apr 2011), "The Case for Cursive," *New York Times*.

[read trust signals](#) Jens Riegelsberger, M. Angela Sasse, and John D. McCarthy (2005), "The Mechanics of Trust: A Framework for Research and Design," *International Journal of Human-Computer Studies*, 62:381–422.

[harder-to-forge ID](#) Bruce Schneier (2007), "Will REAL ID Actually Make Us Safer? An Examination of Privacy and Civil Liberties Concerns," testimony to the Senate Judiciary Committee.

[spent about \\$1 trillion](#) John Mueller and Mark Stewart (2011), *Terrorism, Security, and Money: Balancing the Risks, Benefits, and Costs of Homeland Security*, Oxford University Press.

[doesn't count the wars](#) Linda J. Bilmes and Joseph E. Stiglitz (2008), *The Three Trillion Dollar War: The True Cost of the Iraq Conflict*, W.W. Norton & Co.

[cost-benefit analysis](#) Gary Becker (1968), "Crime and Punishment: An Economic Approach," *The Journal of Political Economy*, 76:169–217.

[passion overrides rationality](#) Howard Engel (2001), *Crimes of Passion: An Unblinking Look at Murderous Love*, Firefly Books.

## Chapter 11

[Rhonda Breard embezzled](#) Kevin Opsahl (11 Aug 2010), "Kirkland Broker Rhonda Breard to Spend Nearly Seven Years in Prison for Fraud," *Seattle Post-Intelligencer*.

[Envy can motivate](#) Simone Moran and Maurice E. Schweitzer (2008), "When Better is Worse: Envy and the Use of Deception," *Negotiation & Conflict Management Research*, 1:3–29.

[things out of anger](#) Yang Wang, Saranga Komanduri, Pedro Giovanni Leon, Gregory Norcie, Alessandro Acquisti, and Lorrie Faith Cranor (2011), "I Regretted the Minute I Pressed Share': A Qualitative Study of Regrets on Facebook," *Proceedings of the 7th Symposium on Usable Privacy and Security (SOUPS2011)*.

[heinous behavior](#) Ervin Staub (1992), *The Roots of Evil: The Origins of Genocide and Other Group Violence*,

Cambridge University Press.

[extreme situations](#) David DeSteno and Piercarlo Valdesolo (2011), *Out of Character: Surprising Truths About the Liar, Cheat, Sinner (and Saint) Lurking in All of Us*, Crown Archetype.

[lethal altruists](#) Adolf Tobeña (2009), "Lethal Altruists: Itineraries along the Dark Outskirts of Moralistic Prosociality," *Annals of the New York Academy of Sciences*, 1167:5–15.

[Abraham Maslow](#) Abraham H. Maslow (1943), "A Theory of Human Motivation," *Psychological Review*, 50:370–96.

[Rational Choice Theory](#) Gary S. Becker (1976), *The Economic Approach to Human Behavior*, University of Chicago Press.

[Bounded Rationality](#) Bryan D. Jones (1999), "Bounded Rationality," *Annual Review of Political Science*, 2:297–321. Daniel Kahneman (2003), "Maps of Bounded Rationality: Psychology for Behavioral Economics," *The American Economic Review*, 93:1449–75. Gerd Gigerenzer (2007), *Gut Feelings: The Intelligence of the Unconscious*, Viking Adult. Dan Ariely (2008), *Predictably Irrational: The Hidden Forces that Shape our Decisions*, Harper Perennial. Ori Brafman and Rom Brafman (2008), *Sway: The Irresistible Pull of Irrational Behavior*, Crown Business. Shankar Vedantam (2010), *The Hidden Brain: How Our Unconscious Minds Elect Presidents, Control Markets, Wage Wars, and Save our Lives*, Spiegel & Grau. Daniel Kahneman (2011), *Thinking Fast and Slow*, Farrar, Straus and Giroux. Duncan J. Watts (2011), *Everything is Obvious: \*Once You Know the Answer*, Crown Business.

[trade-off process](#) Bruce Schneier (2008), "The Psychology of Security," *AFRICACRYPT 2008*, Springer-Verlag, 50–79. Daniel Gardner (2008), *The Science of Fear: Why We Fear the Things We Shouldn't—and Put Ourselves in Greater Danger*, Dutton Adult. Paul Slovic (2000), *The Perception of Risk*, Earthscan Publications Ltd. Barry Glassner (1999), *The Culture of Fear: Why Americans Are Afraid of the Wrong Things*, Basic Books.

[different type of trade-off](#) Lawrence Kohlberg (1981), *Essays on Moral Development, Vol. I: The Philosophy of Moral Development*, Harper & Row.

[Kohlberg's Stages](#) University of Canberra Faculty of Education (2011), "University of Canberra Graduate Diploma of Education E-reserve Lecture Notes: Ed Foundations, Module B, Part 3."

[Emily Dickinson](#) Emily Dickinson (1862), "The soul selects her own society," poem 303.

[morality to be central](#) William Damon (1984), "Self-Understanding and Moral Development from Childhood to Adolescence," in William M. Kurtines and Jacob L. Gewirtz, eds., *Morality, Moral Behavior, and Moral Development*, John Wiley & Sons.

[spiritual geniuses](#) René Girard (1999), *Je Vois Satan Tomber Comme l'Éclair*, Grasset English translation (2001), *I See Satan Fall Like Lightning*, Orbis Books.

[Ralph Waldo Emerson](#) Ralph Waldo Emerson (1841), "Self-Reliance," in *Essays: First Series*.

[Henry David Thoreau](#) Henry David Thoreau (1852), *Walden*.

[Laurel Thatcher Ulrich](#) Laurel T. Ulrich (2007), *Well-Behaved Women Seldom Make History*, Alfred A. Knopf.

[Socrates's morals](#) Plato (360 BCE), *Crito*, tr. Benjamin Jowett, MIT Classics Archive. Plato (360 BCE), *Phaedo*, tr. Benjamin Jowett, MIT Classics Archive. Anthony D'Amato (1976), "Obligation to Obey the Law: A Study of the Death of Socrates," *California Law Review*, 49:1079–1108.

[Misunderstanding the defector](#) Bruce Schneier (2003), *Beyond Fear: Thinking Sensibly About Security in an Uncertain World*, Copernicus Books, Chapter 5.

[there's no guarantee](#) Laurie P. Cohen (29 Nov 2004), "Split Decisions: Federal Cases Show Big Gap in Reward For Cooperation," *Wall Street Journal*.

["Stop Snitching" campaign](#) Rick Hampson (28 Mar 2006), "Anti-Snitch Campaign Riles Police, Prosecutors," *USA Today*. Rick Frei (2010), "Witness Intimidation and the Snitching Project," written testimony submitted to the Subcommittee on Drugs and Crime, U.S. Senate Committee on the Judiciary.

[Con artists try](#) David Maurer (1940), *The Big Con: The Story of the Confidence Man*, Bobbs Merrill.

[Fake anti-virus software](#) Brian Krebs (3 Aug 2011), "Fake Antivirus Industry Down, But Not Out," *Krebs on Security*.

[Internet money laundering](#) Mitchell Zuckoff (15 May 2005), "Annals of Crime: The Perfect Mark," *The New Yorker*, 36–42.

[doctrine of necessity](#) Leslie Wolf-Phillips (1979), "Constitutional Legitimacy: A Study of the Doctrine of Necessity," *Third World Quarterly*, 1:99–133.

[competing interests](#) H.E. Mason, ed. (1996), *Moral Dilemmas and Moral Theory*, Oxford University Press.

[publicly confessed](#) Sean O'Callaghan (27 Jan 1997), "The Lying: A Former Terrorist Describes His Life in the IRA," *National Review*.

[Defecting from the IRA](#) Sean O'Callaghan (1999), *The Informer: The Real Life Story of One Man's War Against Terrorism*, Corgi.

[Ulysses S. Grant](#) Louis A. Coolidge (1917), *Ulysses S. Grant*, Houghton Mifflin. Lawrence M. Salinger (2005), *Encyclopedia of White-Collar & Corporate Crime*, Sage Publications.

[interlocking directorate](#) Mark S. Mizruchi (1996), "What Do Interlocks Do? An Analysis, Critique, and Assessment of Research on Interlocking Directorates," *Annual Review of Sociology*, 22:271–98.



[Larry Froistad confessed](#) Debra J. Saunders (10 May 1998), "Spilled Milk," *San Francisco Chronicle*. Lisa DiCarlo (11 May 1998), "Murder, She Read," *New York Magazine*.

[Police solidarity](#) Jerome H. Skolnick (2002), "Corruption and the Blue Code of Silence," *Police Practice & Research*, 3:7–19. Louise Westmarland (2005), "Police Ethics and Integrity: Breaking the Blue Code of Silence," *Policing & Society*, 15:145–65. Gary R. Rothwell and J. Norman Baldwin, "Whistle-Blowing and the Code of Conduct in Police Agencies," *Crime & Delinquency*, 53:8–10. Barry Wright (2010), "Civilianising the 'Blue Code'? An Examination of Attitudes to Misconduct in the Police Extended Family," *International Journal of Police Science & Management*, 12:339–56.

[policeman beating](#) Jayme Poisson (10 Jun 2011), "Cop Unmasked: Meet Const. Glenn Weddell, the Officer ID'd in G20 Assault," *The Toronto Star*.

## Chapter 12

[Carol Braun was](#) Jed Block (2004), *Betrayal*, Goodwill Industries of North Central Wisconsin, Inc.

[principal-agent problem](#) Kathleen M. Eisenhardt (1989), "Agency Theory: An Assessment and Review," *The Academy of Management Review*, 14:57–74. John M. Darley (2010), "Constructive and Destructive Obedience: A Taxonomy of Principal-Agent Relationships," *Journal of Social Issues*, 41:124–54.

[corporate looting](#) George A. Akerlof, Paul M. Romer, Robert E. Hall, and N. Gregory Mankiw (1993), "Looting: The Economic Underworld of Bankruptcy for Profit," *Brookings Papers on Economic Activity*, 1993(2): 1–73.

[Sambo's restaurants](#) Charles Bernstein (1984), *Sambo's: Only a Fraction of the Action: The Inside Story of a Restaurant Empire's Rise and Fall*, National Literary Guild.

[moral considerations](#) James A. Waters (1978), "Catch 205: Corporate Morality as an Organizational Phenomenon," *Organizational Dynamics*, 6:3–19. James Weber (1990), "Managers' Moral Reasoning: Assessing Their Responses to Three Moral Dilemmas," *Human Relations*, 43:687–702. Thomas M. Jones and Lori Versteegen Ryan (1998), "The Effect of Organizational Forces on Individual Morality: Judgment, Moral Approval, and Behavior," *Business Ethics Quarterly*, 8:431–45. J. Stuart Bunderson (2001), "Normal Injustices and Morality in Complex Organizations," *Journal of Business Ethics*, 33:181–90. Linda K. Treviño, Gary R. Weaver, and Scott J. Reynolds (2006), "Behavioral Ethics in Organizations: A Review," *Journal of Management*, 32:951–90. Nicole Andreoli and Joel Lefkowitz (2009), "Individual and Organizational Antecedents of Misconduct in Organizations," *Journal of Business Ethics*, 85:309–32. William Carbonaro and Jessica L. Collett (2010), "Pushing the Man: Moral Judgments in Group Settings," Paper presented at the Annual Meeting of the American Sociological Association, San Francisco, California.

[many reasons for this](#) James Weber (1990), "Managers' Moral Reasoning: Assessing Their Responses to Three Moral Dilemmas," *Human Relations*, 43:687–702. Maurice Punch (2000), "Suite Violence: Why Managers Murder and Corporations Kill," *Crime, Law & Social Change*, 33:243–80. Yoav Vardi (2001), "The Effects of Organizational and Ethical Climates on Misconduct at Work," *Journal of Business Ethics*, 29:325–37.

[Beech-Nut Corporation](#) Leonard Buder (14 Nov 1987), "Beech-Nut is Fined \$2 Million for Sale of Fake Apple Juice," *New York Times*. James Traub (24 Jul 1988), "Into the Mouths of Babes," *New York Times Magazine*.

[being victimized](#) BishopAccountability.org (2011), "What Percent of Priests Were Accused?"

[actual number of victims](#) BishopAccountability.org (2011), "Data on the Crisis: The Human Toll." BishopAccountability.org (2011), "A Documentary History of the Crisis."

[retained accused priests](#) Brooks Egerton and Reese Dunklin (12 Jun 2002), "Two-Thirds of Bishops Let Accused Priests Work," *Dallas Morning News*.

[Vatican's exhortations](#) Office of the Holy See (1962), "Instruction on the Manner of Proceeding in Cases of Solicitation: The Decree Crimen Sollicitationis," Vatican Press. Catholics for a Free Choice (2002), "The Holy See and the Convention on the Rights of the Child: A Shadow Report," Catholics for a Free Choice. Antony Barnett (17 Aug 2003), "Vatican Told Bishops to Cover Up Sex Abuse: Expulsion Threat in Secret Documents," *The Guardian*. Associated Press (18 Jan 2011), "Vatican Letter Told Ireland's Catholic Bishops Not to Report Child Abuse," *The Guardian*.

[forced the victims](#) Richard Nangle (1 Apr 2002), "Deal Mandated Silence: Accuser Not Allowed to Discuss Abuse Allegations," *Worcester Telegraph & Gazette*. Stephen Gillers (2002), "Speak No Evil: Settlement Agreements Conditioned on Noncooperation Are Illegal and Unethical," *Hofstra Law Review*, 31:1–22.

[top WorldCom executives](#) Susan Pulliam and Deborah Soloman (8 Nov 2008), "How Three Unlikely Sleuths Exposed Fraud at WorldCom: Firm's Own Employees Sniffed Out Cryptic Clues and Followed Hunches," *Wall Street Journal*. Amanda Ripley (30 Dec 2002), "Cynthia Cooper: The Night Detective," *Time*. WorldCom (2003), "Report of Investigation by the Special Investigative Committee of the Board of Directors of WorldCom, Inc." Cynthia Cooper (2008), *Extraordinary Circumstances: The Journey of a Corporate Whistleblower*, John Wiley & Sons, Inc.

[corporate board members](#) Peter J. Henning (2009), "Board Dysfunction: Dealing with the Threat of Corporate Criminal Liability," Wayne State University Law School Legal Studies Research Paper.

[analyst Thomas Drake](#) Jane Mayer (23 May 2011), "The Secret Sharer: Is Thomas Drake an Enemy of the State?" *The New Yorker*. Glenn Greenwald (30 Jul 2011), "Obama's Whistleblower War Suffers Two Defeats," *Salon*.

Thomas Drake and Jessalyn Radack (1 Aug 2011), "A Surprising War on Leaks Under Obama," *Philadelphia Inquirer*.

[1962 Vatican Instruction](#) Office of the Holy See (1962), "Instruction on the Manner of Proceeding in Cases of Solicitation: The Decree Crimen Sollicitationis," Vatican Press.

[drug was ineffective](#) Adrian Viens and Julian Savulescu (2004), "The Olivieri Symposium: Introduction to The Olivieri Symposium," *Journal of Medical Ethics*, 30:1–7. Rosamond Rhodes and J.J. Strain (2004), "The Olivieri Symposium: Whistleblowing in Academic Medicine," *Journal of Medical Ethics*, 30:35–9. Thomas Faunce, Steve Bolsin, and Wei-Ping Chan (2004), "The Olivieri Symposium: Supporting Whistleblowers in Academic Medicine: Training and Respecting the Courage of Professional Conscience," *Journal of Medical Ethics*, 30:40–3.

[exposed misconduct](#) Jaime Adame (2 Jun 2004), "Police Whistleblowers," *Gotham Gazette*.

[military pilots defected](#) John Hooper and Ian Black (21 Feb 2011), "Libya Defectors: Pilots Told to Bomb Protesters Flee to Malta," *The Guardian*.

[U.S.'s use of torture](#) Ian Fishback (28 Sep 2005), "A Matter of Honor," *Washington Post*.

[Deepwater Horizon](#) Joe Nocera (18 Jun 2010), "BP Ignored the Omens of Disaster," *New York Times*.

[employees of BP](#) National Commission on the Deepwater Horizon Oil Spill and Offshore Drilling (2011), *Deep Water: The Gulf Oil Disaster and the Future of Offshore Drilling, Final Report*, Government Printing Office. National Commission on the Deepwater Horizon Oil Spill and Offshore Drilling (2011), *Macondo: The Gulf Oil Disaster, Chief Counsel's Report*, Government Printing Office.

[The "Big Dig."](#) Andrea Estes (24 Jan 2008), "Big Dig Settlement Will Take Quick Hit," *Boston Globe*. Jonathan Saltzman (15 Nov 2008), "Companies to Settle for \$26m in Tunnel Collapse," *Boston Globe*. Gregory W. Sullivan (2005), "A Big Dig Cost Recovery Referral: Waterproofing Mismanagement by Bechtel/Parsons Brinckerhoff in East Boston," Office of the Inspector General, Commonwealth of Massachusetts. David W. Fowler (2010), "The Big Dig: Lessons in Engineering and Ethics," CAEE Annual Alumni Ethics Seminar, Austin, Texas.

[conflict between the](#) Gregory M. Hebb (2002), "Conflict of Interest in Commercial Bank Equity Underwriting," *Financial Review*, 37:185–205. Dan R. Dalton, S. Trevis Certo, and Catherine M. Daily (2003), "Initial Public Offerings as a Web of Conflicts of Interest: An Empirical Assessment," *Business Ethics Quarterly*, 13:289–314. Lily Fang and Ayako Asuda (2009), "The Effectiveness of Reputation as a Disciplinary Mechanism in Sell-Side Research," *Review of Financial Studies*, 22:3735–77.

[A full discussion](#) Erik Sirri (2004), "Investment Banks, Scope, and Unavoidable Conflicts of Interest," *Federal Reserve Bank of Atlanta Economic Review*, Fourth Quarter 2004. Frederick S. Mishkin (2005), "Conflicts of Interest in the Financial Industry," in *The Economics of Money, Banking and Financial Markets, Alternate Edition*, Pearson Education. Frederick S. Mishkin (2005), "Policy Remedies for Conflicts of Interest in the Financial System," Bank of Canada. Cheolwoo Lee (2008), "Analyst Firm Parent-Subsidiary Relationship and Conflict of Interest: Evidence from IPO Recommendations," 2008 Financial Management Association Annual Meeting. Roni Michaely and Kent L. Womack (1999), "Conflict of Interest and the Credibility of Underwriter Analyst Recommendations," *Review of Financial Studies*, 12:653–86. Hamid Mehran and Rene M. Stulz (2007), "The Economics of Conflicts of Interest in Financial Institutions," *Journal of Financial Economics*, 85 (2007): 267–96.

## Chapter 13

[result is price-fixing](#) Robert Schuettinger and Eamonn F. Butler (1979), *Forty Centuries of Wage and Price Controls: How Not to Fight Inflation*, The Heritage Institute.

[Adam Smith](#) Adam Smith (1776), *The Wealth of Nations*.

[global citric acid cartel](#) John M. Connor (1998), "The Global Citric Acid Conspiracy," *Agribusiness*, 14:435–52.

[computer-memory cartel](#) U.S. Department of Justice (5 Oct 2005), "Samsung Agrees to Plead Guilty and to Pay \$300 Million Criminal Fine for Role in Price Fixing Conspiracy: Korean Company Pays Second Largest Criminal Antitrust Fine in U.S. History," press release.

[Ginger Paralysis Association](#) John Parascandola (1995), "The Public Health Service and Jamaica Ginger Paralysis in the 1930s," *Public Health Reports*, 110:361–3. Cecil Munsey (Winter 2006), "Paralysis in a Bottle: The Jake Walk Story," *Bottles & Extras*, 7–12.

[this incident led](#) Paul M. Wax (1995), "Elixirs, Diluents, and the Passage of the 1938 Federal Food, Drug and Cosmetic Act," *Annals of Internal Medicine*, 122:456–61.

[follow its charter](#) Joel Baken (2004), *The Corporation: The Pathological Pursuit of Profit and Power*, Free Press.

[Moral pressure is](#) Maurice Punch (2000), "Suite Violence: Why Managers Murder and Corporations Kill," *Crime, Law & Social Change*, 33:243–80. Jenny White, Albert Bandura, and Lisa A. Bero (2009), "Moral Disengagement in the Corporate World," *Accountability in Research*, 16:41–74. Jennifer J. Kish-Gephart, David A. Harrison, and Linda Klebe Trevino (2010), "Bad Apples, Bad Cases, and Bad Barrels: Meta-Analytic Evidence About Sources of Unethical Decisions at Work," *Journal of Applied Psychology*, 95:1–3.

[overseas sweatshops](#) Dexter Roberts, Pete Engardio, Aaron Bernstein, Stanley Holmes, and Xiang Ji (27 Nov 2006), "Secrets, Lies, and Sweatshops," *Bloomberg Business Week*. Eric V. Edmonds and Nina Pavcnik (2005),

"Child Labor in the Global Economy," *Journal of Economic Perspectives*, 19:199–220.

[replace management](#) Leemore Dafny and David Dranove (2009), "Regulatory Exploitation and Management Changes: Upcoding in the Hospital Industry," *Journal of Law & Economics*, 52:223–50.

[immortal sociopaths](#) Joel Baken (2004), *The Corporation: The Pathological Pursuit of Profit and Power*, Free Press.

[good for their reputation](#) Charles J. Fombrun, Naomi A. Gardberg, and Michael L. Barnett (2000), "Opportunity Platforms and Safety Nets: Corporate Citizenship and Reputational Risk," *Business & Society Review*, 105:85–106. David M. Kreps (2000), "Corporate Culture and Economic Theory," in Nicolai J. Foss, ed., *The Theory of the Firm: Critical Perspectives on Business and Management*, Taylor & Francis. Einer Elhauge (2005), "Sacrificing Corporate Profits in the Public Interest," *New York University Law Review*, 80:733–869.

[Baron Thurlow](#) John Poynder (1844), *Literary Extracts, Vol. 1*, J. Hatchard & Sons, 2.

[no soul to damn](#) John C. Coffee (1981), "'No Soul to Damn, No Body to Kick': An Unscandalized Inquiry Into the Problem of Corporate Punishment," *Michigan Law Review*, 79:386–459.

[a lot of money](#) Kantar Media (17 Mar 2011), "Kantar Media Reports U.S. Advertising Expenditures Increased 6.5 Percent In 2010," press release.

[psychological manipulation](#) Robert B. Cialdini (1998), *Influence: The Psychology of Persuasion*, Collins.

[dose of neuroscience](#) Samuel M. McClure, Jian Li, Damon Tomlin, Kim S. Cypert, Latané M. Montague, and P. Read Montague (2004). "Neural Correlates of Behavioral Preference for Culturally Familiar Drinks," *Neuron*, 44:379–87. Brian Knutson, Scott Rick, G. Eliot Wimmer, Drazen Prelec, and George Loewenstein (2007), "Neural Predictors of Purchases," *Neuron*, 53:147–56. Dan Ariely and Gregory S. Berns (2010), "Neuromarketing: The Hope and Hype of Neuroimaging in Business," *Nature Reviews Neuroscience*, 11:284–92. Douglas Rushkoff (2000), "Advertising," Chapter 5 of *Coercion: Why We Listen To What 'They' Say*, Putnam.

[150 people died](#) U.S. Food and Drug Administration (2009), "Information on Adverse Event Reports and Heparin." Alan Coukell (2009), "Protecting Consumers from Adulterated Drugs," presentation at U.S. Food and Drug Administration, Public Meeting on Economically Motivated Adulteration, College Park, Maryland.

[Cargill recalled](#) Tom Watkins (2011), "Cargill Recalls 36 Million Pounds of Ground Turkey," *CNN News*.

[ChoicePoint allowed](#) Bob Sullivan (14 Feb 2005), "Database Giant Gives Access to Fake Firms," *MSNBC*. Jaikumar Vijayan (26 Jan 2006), "FTC Imposes \$10M Fine Against ChoicePoint for Data Breach," *Computer World*.

[There's recognition](#) Daniel G. Goldstein and Gerd Gigerenzer (2002), "Models of Ecological Rationality: The Recognition Heuristic," *Psychological Review*, 109:75–90.

[There's social proof](#) Herbert C. Kelman (1958), "Compliance, Identification, and Internalization: Three Processes of Attitude Change," *Journal of Conflict Resolution*, 2:51–60.

[attribute substitution](#) Daniel Kahneman and Shane Frederick (2002), "Representativeness Revisited: Attribute Substitution in Intuitive Judgment," in Thomas Gilovich, Dale Griffin, and Daniel Kahneman, eds., *Heuristics and Biases: The Psychology of Intuitive Judgment*, Cambridge University Press, 49–81.

[a lemons market](#) George Akerlof (1970), "The Market for Lemons: Quality Uncertainty and the Market Mechanism," *Quarterly Journal of Economics*, 83:488–500. George E. Hoffer and Michael D. Pratt (1987), "Used Vehicles, Lemons Markets, and Used Car Rules: Some Empirical Evidence," *Journal of Consumer Policy*, 10:409–14. Steven E. Kaplan, Pamela B. Roush, and Linda Thorne (2007), "Andersen and the Market for Lemons in Audit Reports," *Journal of Business Ethics*, 70:363–73.

[Globalization is making](#) Rick Mullin (2011), "Shock to the System: Big Questions About Drug Safety Arise in the Wake of Rampant Supply-Chain Globalization," *Chemical & Engineering News*, 89:11–20.

[Glaxo Smith-Kline](#) Toni Clarke (26 Oct 2010), "Glaxo to Pay \$750 Million in Adulterated Drugs Case," Reuters.

[died of kidney failure](#) Walt Bogdanich and Jake Hooker (6 May 2007), "From China to Panama, a Trail of Poisoned Medicine," *New York Times*.

[prone to rollover](#) Joan Claybrook (2001), "Criminal Penalties for Corporate Misbehavior," *Tort Source*, 3:1, 4.

[salmonella outbreak](#) Mary Clare Jalonick (22 Aug 2010), "A Supplier in Egg Recall Has History of Violations, Including in Maine," *Portland Press Herald*. Brendan Flaherty (2010), "Salmonella Outbreak in Eggs: An Update," *Food & Drug Law Institute Update*, 6: 16–19.

[the drug Rebif](#) U.S. Department of Justice (4 May 2011), "Pharmaceutical Giant, Serono, Agrees to Pay \$44.3 Million to Settle False Claims Act Case," press release. *Wall Street Journal* (5 May 2011), "Settlement Reached In MS Drug Case."

[using child labor](#) United States International Child Labor Program (1998), "By the Sweat and Toil of Children, Vol. V: Efforts to Eliminate Child Labor," Federal Publications, paper 144.

[oil industry wanting](#) Jonathan Fahey (12 May 2011), "How the Oil Industry Saves \$4.4 Billion in Taxes," *USA Today*.

[law passed limiting](#) Fred J. Hellinger and Gary J. Young (2005), "Health Plan Liability and ERISA: The Expanding Scope of State Legislation," *American Journal of Public Health*, 95:217–23. Katherine L. Record (2010), "Wielding the Wand Without Facing the Music: Allowing Utilization Review Physicians to Trump Doctors' Orders, but Protecting Them from the Legal Risk Ordinarily Attached to the Medical Degree," *Duke Law Journal*, 59:955–1000.

[licensing interior designers](#) Janet Zink (1 Apr 2011), "Real Knock-Down, Drag-Out Fight in Florida Is over



Commercial Interior Design," *St. Petersburg Times*. George F. Will (22 Mar 2007), "Wallpapering with Red Tape," *The Washington Post*. Dick M. Carpenter II (2007), "Designing Cartels: How Industry Insiders Cut Out Competition," Institute for Justice.

[horizontal drilling technology](#) Carl T. Montgomery and Michael B. Smith (2010), "Hydraulic Fracturing: History of an Enduring Technology," *Journal of Petroleum Technology*, 62:26–41.

[shoddy building practices](#) Heather Timmons (25 Apr 2003), "Shoddy Building in the Housing Boom?" *Bloomberg BusinessWeek*.

[used to be smaller](#) John Stopford (1998), "Multinational Corporations," *Foreign Policy*, 113:12–24. Gardiner C. Means (1931), "The Growth in the Relative Importance of the Large Corporation in American Economic Life," *The American Economic Review*, 21:10–42.

[Ronald Coase first](#) Ronald Coase (1937), "The Nature of the Firm," *Economica*, 4:386–405.

[Nick Leeson's](#) Richard W. Stevenson (28 Feb 1995), "The Collapse of Barings: The Overview: Young Trader's \$29 Billion Bet Brings down a Venerable Firm," *New York Times*. Erik Ipsen (19 Jul 1995), "Bank of England Cites Fraud in Barings Collapse," *New York Times*. Peter Culshaw (8 Jan 2009), "Nick Leeson: How the Original Rogue Trader at Barings Bank Is Thriving in the Credit Crunch," *The Telegraph*.

[Kweku Adoboli](#) Victoria Howley and Emma Thomasson (16 Sep 2011), "UBS \$2 Billion Rogue Trade Suspect Held in London," *Reuters*. Haig Simonian (24 Sep 2011), "UBS Chief Resigns Over Rogue Trade Affair," *Financial Times*.

[Different countries](#) John M. Connor and Darren Bush (2008), "How to Block Cartel Formation and Price Fixing: Using Extraterritorial Application of the Antitrust Laws as a Deterrence Mechanism," *Penn State Law Review*, 112:813–57. John M. Connor (2002), "The Food and Agricultural Global Cartels of the 1990s: Overview and Update," Purdue University Department of Agricultural Economics, Staff Paper 02–4.

[Amazon.com uses its](#) Jeanine Poggi (2011), "Amazon Sales Tax: The Battle, State by State," *TheStreet.com*.

[free is very different](#) Chris Anderson (2009), *Free: The Future of a Radical Price*, Hyperion. Dan Ariely (2008), *Predictably Irrational: The Hidden Forces That Shape Our Decisions*, HarperCollins.

[Chemical plants](#) David Bollier, Frank Clemente, Laura MacCleery, Hugh Jackson, and Craig Aaron (2004), "Homeland Unsecured," *Public Citizen*. Linda-Jo Schierow (2006), "Chemical Facility Security," Congressional Research Service Report RL-31530.

[hundreds of plants](#) Margaret E. Kosal (2006), "Terrorism Targeting Industrial Chemical Facilities: Strategic Motivation and the Implications for U.S. Security," *Studies in Conflict & Terrorism*, 29:719–51.

[The problem is](#) Jeffrey Hahn, Donna Post Guillen, and Thomas Anderson (2005), "Process Control Systems in the Chemical Industry: Safety vs. Security," Paper presented at the 20th Annual CCPS International Conference, Idaho National Laboratory, April 2005.

## Chapter 14

[Full-body scanners](#) Leon Kaufman and Joseph W. Carlson (2010), "An Evaluation of Airport X-Ray Backscatter Units Based on Image Characteristics," *Journal of Transportation Security*, 4:73–94. Andrew Welch (2010), "Full-Body Scanners: Full Protection from Terrorist Attacks or Full-On Violation of the Constitution," *Transportation Law Journal*, 37:167–98. David J. Brenner (2011), "Are X-Ray Backscatter Scanners Safe for Airport Passenger Screening?" *Radiology*, 259:6–10.

[the underwear bomber](#) Steve Lord (17 Mar 2010), "Aviation Security: TSA Is Increasing Procurement and Deployment of the Advanced Imaging Technology, but Challenges to This Effort and Other Areas of Aviation Security Remain," Testimony of the Director, Homeland Security and Justice Issues, United States Government Accountability Office, before the Subcommittee on Transportation Security and Infrastructure Protection, Committee on Homeland Security, House of Representatives, Report GAO-10-484T.

[strip-search every](#) Electronic Privacy Information Center (10 Mar 2011), "DHS: We Have the Authority to Routinely Strip-Search Air Travelers," press release. Electronic Privacy Information Center (15 Jul 2011), "Federal Appeals Court: TSA Violated Federal Law, Must Take Public Comment on Body Scanners," press release. *EPIC v. DHS* (15 Jul 2011), Opinion, Case No. 10N1157. DC Circuit Court of Appeals, filed November 1, 2010.

[September 11 attacks](#) Nate Silver (4 Jan 2010), "The Skies Are as Friendly as Ever: 9/11, Al Qaeda Obscure Statistics on Airline Safety," *FiveThirtyEight.com*.

[scale is too large](#) Bruce Schneier (2008), "Seven Habits of Highly Unsuccessful Terrorists," *Wired News*. Max Abrams (2008), "What Terrorists Really Want," *International Security*, 32:78–105.

[regulatory capture](#) Jean J. Laffont and Jean Tirole (1991), "The Politics of Government Decision-Making: A Theory of Regulatory Capture," *The Quarterly Journal of Economics*, 106:1089–127. Mark Jickling (2004), "Barriers to Corporate Fraud: How They Work, Why They Fail," CRS Report for Congress RL32718, Congressional Research Service. Dieter Helm (2006), "Regulatory Reform, Capture, and the Regulatory Burden," *Oxford Review of Economic Policy*, 22:169–86. Ernesto Dal Bó (2006), "Regulatory Capture: A Review," *Oxford Review of Economic Policy*, 22:203–25.

[steering contracts to](#) Charlie Savage (11 Sep 2008), "Sex, Drug Use and Graft Cited in Interior Department," *New York Times*. Earl E. Devaney (9 Sep 2008), "OIG Investigations of MMS Employees," memorandum to Secretary Dirk Kempthorne from the Office of the Inspector General, United States Department of the Interior.

[Federal Aviation Administration](#) Mark C. Niles (2002), "On the Hijacking of Agencies (And Airplanes): The Federal Aviation Administration, 'Agency Capture,' and Airline Security," *Journal of Gender, Social Policy & the Law*, 10:381–442. John Downer (2010), "Trust and Technology: The Social Foundations of Aviation Regulation," *The British Journal of Sociology*, 61:83–106. Johanna Neumann (3 Apr 2008), "FAA's 'Culture of Coziness' Targeted in Airline Safety Hearing," *Los Angeles Times*.

[Securities and Exchange](#) Susan E. Woodward (1998), "Regulatory Capture at the Securities and Exchange Commission," prepared for the Milken Institute Conference on Capital Markets, March 16, 1998, Santa Monica, California. Mark Quintyn and Michael W. Taylor (2002), "Regulatory and Supervisory Independence and Financial Stability," International Monetary Fund Working Paper 02–46. Nicholas Dorn (2010), "The Governance of Securities: Ponzi Finance, Regulatory Convergence, Credit Crunch," *British Journal of Criminology*, 50:23–45.

[illegally spying](#) James Risen and Eric Lichtblau (16 Dec 2005), "Bush Lets U.S. Spy on Callers without Courts," *New York Times*. *American Civil Liberties Union et al. v. National Security Agency et al.* (18 Aug 2006), Order, United States District Court for the Eastern District of Michigan, Case No. 06-CV-10204. *American Civil Liberties Union et al. v. National Security Agency et al.* (4 Oct 2006), Order, United States Court of Appeals for the Sixth Circuit, Case Nos. 06–2095/2140. Charlie Savage and James Risen (31 Mar 2010), "Federal Judge Finds N.S.A. Wiretaps Were Illegal," *New York Times*. *Al-Haramain Islamic Foundation, Inc., et al., v. Barack H. Obama, et al.* (31 Mar 2010), Opinion, United States Court of Appeals for the Ninth Circuit, Case No. C 07–0109 VRW.

[authorizing the torture](#) Jane Mayer (13 Aug 2007), "The Black Sites," *The New Yorker*. Daniel Nasaw (24 Aug 2009), "Newly Released CIA Report Details Interrogation Techniques," *The Guardian*. Associated Press (14 Jun 2011), "New Scrutiny of CIA Torture, Botched Rendition," *CBS News*. Eric Lichtblau and Eric Schmitt (1 Jul 2011), "U.S. Widens Inquiries into 2 Jail Deaths," *New York Times*.

[right to assassinate](#) John Griffing (5 Oct 2011), "Obama, the Hitman: Killing Due Process," *The American Thinker*.

[court rejected EPIC's](#) Electronic Privacy Information Center (15 Jul 2011), "Federal Appeals Court: TSA Violated Federal Law, Must Take Public Comment on Body Scanners," press release. *EPIC v. DHS* (15 Jul 2011), Opinion, Case No. 10N1157 (filed Nov 1, 2010), DC Circuit Court of Appeals.

## Chapter 15

[people paying taxes](#) Luigi Bosco and Luigi Mittone (1997), "Tax Evasion and Moral Constraints: Some Experimental Evidence," *Kyklos*, 50:297–324.

[a lot of fraud](#) U.S. Department of the Treasury (2006), "IRS Updates Tax Gap Estimates," Informational release IR-2006–28.

[third-party estimate](#) Edgar L. Feige and Richard Cebula (2011), "America's Underground Economy: Measuring the Size, Growth and Determinants of Income Tax Evasion in the U.S.," Munich Personal RePEc Archive, MPRA Paper No. 29672.

[cheating on their taxes](#) James A. Tackett, Joe Antenucci, and Fran Wolf (2006), "A Criminological Perspective of Tax Evasion," *Tax Notes*, 110:654–8.

[reasons people cheat](#) Stuart P. Green (2009), "What Is Wrong With Tax Evasion?" *Houston Business & Tax Journal*, 9:220–33.

[very little enforcement](#) U.S. Department of the Treasury (2008), *IRS Oversight Board Annual Report 2007*.

[IRS examined less](#) Department of the Treasury (2008), Internal Revenue Service Data Book 2007.

[Corporate audits are down](#) Transactional Records Access Clearing House (2008), "Audits of Largest Corporations Slide to All Time Low."

[increasing the penalties](#) Mukhtar M. Ali, H. Wayne Cecil, and James A. Knoblett (2001), "The Effects of Tax Rates and Enforcement Policies on Taxpayer Compliance: A Study of Self-Employed Taxpayers," *Atlantic Economics Journal*, 29:186–202.

[increases compliance](#) Robert Halperin and Joseph Tzur (2002), "Tax Evasion and the Low Penalty, Low Audit Rate Phenomenon," *Journal of Accounting & Public Policy*, 9:179–96.

[Second, it's profitable](#) Patricia Sabatini (25 Mar 2007), "Tax Cheats Cost U.S. Hundreds of Billions," *Pittsburgh Post-Gazette*.

[failing to declare](#) Richard S. Dunham (15 Apr 1998), "Maybe Those Meanies at the IRS Aren't So Bad After All," *Business Week*.

[demonized taxes](#) Robert W. McGee (2004), *The Philosophy of Taxation and Public Finance*, Springer-Verlag.

[these reasons interact](#) Edgar L. Feige and Richard Cebula (2011), "America's Underground Economy: Measuring the Size, Growth and Determinants of Income Tax Evasion in the U.S.," Munich Personal RePEc Archive, MPRA Paper No. 29672 (Jan 2011).

[blamed income inequality](#) Kim M. Bloomquist (2003), "Tax Evasion, Income Inequality and Opportunity Costs of

Compliance,” Paper presented at the 96th Annual Conference of the National Tax Association.

[carried-interest tax](#) Nicholas Kristof (6 Jul 2011), “Taxes and Billionaires,” *New York Times*. Laura Saunders (6 Aug 2011), “‘Carried Interest’ in the Cross Hairs,” *Wall Street Journal*.

[investment tax credit](#) Don MacKenzie, Louise Bedsworth, and David Friedman (2005), “Fuel Economy Fraud: Closing the Loopholes That Increase U.S. Oil Dependence,” Union of Concerned Scientists. Jim Hopkins (10 Feb 2004), “SUV Sales Climb on Tax Loophole,” *USA Today*.

[lost federal revenue](#) Scott Horsley (30 Jun 2011), “What Tax ‘Loopholes’ Does Obama Want to Close?” National Public Radio.

[perceive tax evasion](#) Erich Kirchler, Boris Maciejovsky, and Friedrich Schneider (2003), “Everyday Representations of Tax Avoidance, Tax Evasion, and Tax Flight: Do Legal Differences Matter?” *Journal of Economic Psychology*, 24:535–53.

[just as immoral](#) Zoë Prebble and John M. Prebble (2010), “The Morality of Tax Avoidance,” *Creighton Law Review*, 20:101–58.

[first people arrested](#) Bradley S. Davis (1994), “It’s Virus Season Again, Has Your Computer Been Vaccinated? A Survey of Computer Crime Legislation as a Response to Malevolent Software,” *Washington University Law Quarterly*, 72:410–40. Patrick J. Leahy (1992), “New Laws for New Technologies: Current Issues Facing the Subcommittee on Technology and the Law,” *Harvard Journal of Law & Technology*, 5:1–23.

[laws regulating surveillance](#) Valerie Caproni (17 Feb 2011), “Going Dark: Lawful Electronic Surveillance in the Face of New Technologies,” testimony before the House Judiciary Committee.

[legalization of abortion](#) John J. Donohue III and Steven D. Levitt, “The Impact of Legalized Abortion on Crime,” *The Quarterly Journal of Economics*, 116:379–420.

[unintended consequences](#) Thomas P. Bonczar and Allen J. Beck (1997), “Lifetime Likelihood of Going to State or Federal Prison,” Special Report NCJ-160092, U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Heather C. West, William J. Sabol, and Sarah J. Greenman (2010), “Prisoners in 2009,” Report NCJ 231675, U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. Bruce Western and Christopher Wildeman (2009), “The Black Family and Mass Incarceration,” *The Annals of the American Academy of Political and Social Science*, 621:221–42.

[increasing shoplifting](#) Kerry Segrave (2001), *Shoplifting: A Social History*, McFarland & Co.

[fewer bicycle riders](#) Maxwell H. Cameron, A. Peter Vulcan, Caroline F. Finch, and Stuart V. Newstead (1994), “Mandatory Bicycle Helmet Use Following a Decade of Helmet Promotion in Victoria, Australia: An Evaluation,” *Accident Analysis & Prevention*, 26:325–7. Dorothy L. Robinson (2007), “Bicycle Helmet Legislation: Can We Reach a Consensus?” *Accident Analysis & Prevention*, 39:86–93. Christopher S. Carpenter and Mark F. Stehr (2010), “Intended and Unintended Effects of Youth Bicycle Helmet Laws,” NBER Working Paper No. 15658, National Bureau of Economic Research.

[chilling effect on](#) Electronic Frontier Foundation (2008), “Unintended Consequences: Ten Years Under DMCA.”

[increased violence](#) Dan Werb, Greg Rowell, Gordon Guyatt, Thomas Kerr, Julio Montaner, and Evan Wood (2011), “Effect of Drug Law Enforcement on Drug Market Violence: A Systematic Review,” *International Journal of Drug Policy*, 22:87–94.

[trade-off between](#) Bruce Schneier (2003), *Beyond Fear: Thinking Sensibly About Security in an Uncertain World*, Copernicus Books, Chapter 1.

[different characteristics](#) Bruce Schneier (2003), *Beyond Fear: Thinking Sensibly About Security in an Uncertain World*, Copernicus Books, Chapter 5.

[unit pricing was](#) Laetitia B. Mulder, Eric van Dijk, David De Cremer, and Henk A.M. Wilke (2006), “When Sanctions Fail to Increase Cooperation in Social Dilemmas: Considering the Presence of an Alternative Option to Defect,” *Personality & Social Psychology Bulletin*, 32:1312–24. Marie Lynn Miranda and Joseph E. Aldy (1998), “Unit Pricing of Residential Municipal Waste: Lessons From Nine Case Studies,” *Journal of Environmental Management*, 52:79–93.

[Stuffing more trash](#) Don Fullerton and Thomas C. Kinneman (1996), “Household Responses to Pricing Garbage by the Bag,” *The American Economic Review*, 86:971–84.

[based on perceived](#) Bruce Schneier (3 Apr 2008), “The Difference Between Feeling and Reality in Security,” *Wired News*.

[Natural Biases](#) Barry Glassner (1999), *The Culture of Fear: Why Americans Are Afraid of the Wrong Things*, Basic Books. Paul Slovic (2000), *The Perception of Risk*, Earthscan Publications. Daniel Gilbert (2 Jul 2006), “If Only Gay Sex Caused Global Warming,” *Los Angeles Times*. Jeffrey Kluger (26 Nov 2006), “How Americans Are Living Dangerously,” *Time*. Cass Sunstein and Richard Zeckhauser (2011), “Overreaction to Fearsome Risks,” *Environmental & Resource Economics*, 48:435–49.

[John Mueller wrote](#) John Mueller (2004), “A False Sense of Insecurity?” *Regulation*, 27:42–6.

[exaggerate the risk](#) John Mueller (2006), *Overblown: How Politicians and the Terrorism Industry Inflate National Security Threats, and Why We Believe Them*, Free Press.

[tolerance for risk](#) Meir Statman (2010), “The Cultures of Risk Tolerance,” *Social Sciences Research Network*



*Behavioral & Experimental Finance eJournal*, 1–23.

*income inequality* Kate Pickett and Richard Wilkinson (2011), *The Spirit Level: Why Greater Equality Makes Societies Stronger*, Bloomsbury Press.

*false confessions* Saul M. Kassin, “False Confessions: Causes, Consequences, and Implications for Reform,” *Current Directions in Psychological Science*, 17: 249–53. Jennifer T. Perillo and Saul M. Kassin (2011), “Inside Interrogation: The Lie, The Bluff, and False Confessions,” *Law & Human Behavior*, 35:327–37.

*teachers cheated on* Jack Gillum and Marisol Bello (30 Mar 2011), “When Standardized Test Scores Soared in D.C., Were the Gains Real?” *USA Today*.

*analysis of test data* Brian A. Jacob and Steven D. Levitt (2003), “Rotten Apples: An Investigation of the Prevalence and Predictors of Teacher Cheating,” *The Quarterly Journal of Economics*, 118:843–77. Brian A. Jacob and Steven D. Levitt (2003), “Catching Cheating Teachers: The Results of an Unusual Experiment in Implementing Theory,” in William G. Gale and Janet Rothenberg Pack, eds., *Brookings-Wharton Papers on Urban Affairs*, Brookings Institution Press, 185–220.

*If you pay CEOs* Joel Spolsky (2001), “Measurement,” *Joel on Software*.

*even more overfishing* British Broadcasting Corporation (5 Apr 2006), “River Patrol to Halt Eel Poachers,” *BBC News*. Steven Morris (28 May 2010), “Poachers Devastate Somerset’s Elver Fisheries,” *The Guardian*. Caroline Wyatt (11 Apr 2005), “Asia Demand Threatens French Eels,” *BBC News*. Adam Sage (13 Dec 2007), “Eel Poachers Put ‘White Gold’ on Critical List,” *Times*. Bob Ritchie and Dan McKiernan (1999), “Environmental Police Prepare for ‘Glass Eel’ Poaching Season,” *Massachusetts Department of Marine Fisheries DMF News*, 19:6. Atlantic States Marine Fisheries Commission, American Eel Plan Development Team (2000), “Interstate Fishery Management Plan for American Eel (*Anguilla rostrata*),” Fishery Management Report No. 36. Samuel J. Baldwin (11 May 2011), “Glass Eels Hit \$950 Per Pound,” *The Lincoln County News*.

*farm these eels* *Japan Times* (10 Apr 2010), “Japan Succeeds in World’s First Complete Cultivation of Eels.”

*In ancient Rome* Robert L. Wilken (1985), *The Christians as the Romans Saw Them*, Yale University Press. Peter Brown (1995), *Authority and the Sacred: Aspects of the Christianization of the Roman World*, Cambridge University Press.

*Norms can change quickly* Ayelet Gneezy and Daniel M.T. Fessler (2011), “Conflict, Sticks, and Carrots: War Increases Prosocial Punishments and Rewards,” *Proceedings of the Royal Society B: Biological Sciences*, published online before print, 8 Jun 2011:1–5.

*women or slaves* Barbara C. Jordan (24 Jul 1974), “Statement on House Judiciary Proceedings to Impeach President Richard Nixon,” House Judiciary Committee.

*political debates* Howard Fineman (2008), *The Thirteen American Arguments: Enduring Debates That Define and Inspire Our Country*, Random House.

## Chapter 16

*have more flaws* Bruce Schneier (Mar 2000), “Software Complexity and Security,” *Crypto-Gram*.

*fail in surprising* Charles Perrow (1984), *Normal Accidents: Living with High-Risk Technologies*, Basic Books. Dietrich Dörner (1996), *The Logic of Failure: Recognizing and Avoiding Error in Complex Situations*, Perseus Books.

*This aspect of scale* Jane Wakefield (22 Aug 2011), “When Algorithms Control the World,” *BBC News*.

*tend to minimize* Daniel Gilbert (2 Jul 2006), “If Only Gay Sex Caused Global Warming,” *Los Angeles Times*.

*pretending to eliminate* Frank Furedi (1997), *The Culture of Fear*, Continuum International Publishing Group.

*knobs being twiddled* Bruce Schneier (2003), *Beyond Fear: Thinking Sensibly About Security in an Uncertain World*, Copernicus Books, Chapter 7.

*hackers to find* Ron Rosenbaum (Oct 1971), “Secrets of the Little Blue Box,” *Esquire*, 117–25, 222–36. Gary D. Robson (Spring 2004), “The Origins of Phreaking,” *Blacklisted 411*, 6:17–23.

*Criminals can form* Allan Castle (1997), “Transnational Organized Crime and International Security,” Institute of International Relations, The University of British Columbia Working Paper No. 19. Phil Williams (2001), “Transnational Criminal Networks,” in John Arquilla and David F. Ronfeldt, eds., *Networks and Netwars: The Future of Terror, Crime, and Militancy*, RAND Corporation, 61–97. Oded Löwenheim (2002), “Transnational Criminal Organizations and Security: The Case Against Inflating the Threat,” *International Journal*, 57:513–36.

*Criminals were simply* Warwick Ashford (6 Oct 2010), “ISSE 2010: Police Are Playing Catch-Up as Criminals Embrace IT,” *Computer Weekly*. Stephen Pritchard (2 Jun 2011), “Vulnerabilities: Battle Is Joined on Two Fronts,” *Financial Times*.

*position of the interior* Carl von Clausewitz (1832), *On War*.

*Alvin Toffler wrote* Alvin Toffler (1970), *Future Shock*, Random House.

*People learn how* Michael Anissimov (2004), “Future Shock Level Analysis,” *AcceleratingFuture.com*.

*new type of grifter* David Maurer (1940), *The Big Con: The Story of the Confidence Man*, Bobbs Merrill.

[Other cities followed](#) J.L. Lyman (1964), "The Metropolitan Police Act of 1829: An Analysis of Certain Events Influencing the Passage and Character of the Metropolitan Police Act in England," *The Journal of Criminal Law, Criminology, & Police Science*, 55:141–54.

[Internet worm Stuxnet](#) Kim Zetter (2011), "How Digital Detectives Deciphered Stuxnet, the Most Menacing Malware in History," *Threat Level* blog, Wired.com.

[salami attacks](#) Michael E. Kabay (24 Jul 2002), "Salami Fraud," *Network World*.

[just use software](#) Bruce Schneier (2000), *Secrets & Lies: Digital Security in a Networked World*, John Wiley & Sons.

[delayed publishing](#) Eric Lichtblau (26 Mar 2008), "The Education of a 9/11 Reporter: The Inside Drama Behind the Times' Warrantless Wiretapping Story," *Slate*.

[Clay Shirky referred](#) Clay Shirky (31 Dec 2010), "Half-Formed Thought on WikiLeaks & Global Action," *Shirky.com*.

[other business considerations](#) Alfred Rappaport (2005), "The Economics of Short-Term Performance Obsession," *Financial Analysts Journal*, 61:65–79. Thomas P. Byrne (2010), "False Profits: Reviving the Corporation's Public Purpose," *UCLA Law Review Discourse*, 25:25–49. Patrick Bolton, Jose Scheinkman, and Wei Xiong (2006), "Executive Compensation and Short-Termist Behaviour in Speculative Markets," *Review of Economic Studies*, 73:577–610. Lynne Dallas (2011), "Short-Termism, the Financial Crisis and Corporate Governance," San Diego Legal Studies Paper No. 11–052. Lawrence Mitchell (2011), *Corporate Irresponsibility: America's Newest Export*, Yale University Press. Alfred Rappaport (2011), *Saving Capitalism from Short-Termism*, McGraw-Hill.

[investors have access](#) John C. Bogle (2005), *The Battle for the Soul of Capitalism*, Yale University Press.

[wicked problems](#) C. West Churchman (1967), "Wicked Problems," *Management Science*, 14:141–2. Horst Rittel and Melvin Webber (1973), "Dilemmas in a General Theory of Planning," *Policy Sciences*, 4:155–69. E. Jeffrey Conklin (2006), *Dialog Mapping: Building a Shared Understanding of Wicked Problems*, John Wiley & Sons.

[ubiquity of data](#) Charles Stross (2011), "Network Security in the Medium Term, 2061–2561 AD," paper presented at USENIX Security.

[better off spending](#) Bruce Schneier (2009), "Beyond Security Theater," *New Internationalist*, 427:10–13.

[Yochai Benkler](#) Yochai Benkler (2011), *The Penguin and the Leviathan: How Cooperation Triumphs Over Self-Interest*, Crown Business, 25–6.

[security is a process](#) Bruce Schneier (2000), *Secrets and Lies: Digital Security in a Networked World*, John Wiley & Sons, 273, 395.

## Chapter 17

[Trust in things](#) Bart Nooteboom (2002), *Trust: Forms, Foundations, Functions, Failures and Figures*, Edward Elgar, 45.

[trust is a social good](#) Sissela Bok (1978), *Lying: Moral Choice in Private and Public Life*, Pantheon Books, 26–7.

[trust is the key](#) James Colman (1988), *Foundations of Social Theory*, Harvard University Press. Francis Fukuyama (1995), "Social Capital and the Global Economy: A Redrawn Map of the World," *Foreign Affairs*, 75:89–103. Luigi Guiso, Paola Sapienza, and Luigi Zingales (2004), "The Role of Social Capital in Financial Development," *American Economic Review*, 94:426–56.

[this parable](#) Richard Beck (2011), "Tales of the Demonic," *Experimental Theology*.

[do not follow](#) Tom Zeller, Jr. (26 Jul 2011), "Tim De Christopher: Is Civil Disobedience the Key to Climate Change Action?" *The Huffington Post*.

[Medal of Honor](#) Michael A. Memoli and Michael Muskal (15 Sep 2011), "Obama Awards Medal of Honor to Kentucky Marine," *Los Angeles Times*.

[contact a reporter](#) Richard L. Rashke (2000), *The Killing of Karen Silkwood: The Story Behind the Kerr-McGee Plutonium Case*, Second Edition, Cornell University Press.

## Notes

### Chapter 1

[five levels of trust](#) Steven M.R. Covey (2006), *The Speed of Trust: The One Thing That Changes Everything*, Free Press.

[To trust is to bet](#) Piero Ferrucci (2006), *The Power of Kindness: The Unexpected Benefits of Leading a Compassionate Life*, Tarcher, 80–1.

[When we say we trust](#) Diego Gambetta (1988), "Can We Trust Trust?" in Diego Gambetta, ed., *Trust: Making and Breaking Cooperative Relations*, Blackwell Publishers, 213–37.

[We will define trust](#) David M. Messick and Roderick M. Kramer (2001), "Trust as a Form of Shallow Morality," in

Karen S. Cook, ed., *Trust in Society*, Russell Sage Foundation, 89–117.

[three-level progression](#) Anthony Giddens (1990), *The Consequences of Modernity*, Stanford University Press, 114–24.

[Piotr Cofta covered](#) Piotr Cofta (2007), *Trust, Complexity, and Control: Confidence in a Convergent World*, John Wiley & Sons.

[findings are false](#) John P.A. Ioannidis (2005), “Why Most Published Research Findings Are False,” *PLoS Medicine*, 2(8): e124.

[sloppy methodology](#) Eric-Jan Wagenmakers, Rudd Wetzels, Denny Borsboom, and Han van der Maas (2011), “Why Psychologists Must Change the Way They Analyze Their Data: The Case of Psi,” *Journal of Personality and Social Psychology*, 100:426–32. Joseph P. Simmons, Leif D. Nelson, and Uri Simonsohn (2011), “False Positive Psychology: Undisclosed Flexibility in Data Collection and Analysis Allows Presenting Anything as Significant,” *Psychological Science*, 22:1359–66.

[narrow and unrepresentative](#) Joseph Henrich, Steven J. Heine, and Ara Norenzayan (2010), “The Weirdest People in the World?” *Behavioral & Brain Sciences*, 33:61–83.

[Adam Smith](#) Adam Smith (1759), *The Theory of Moral Sentiments*.

## Chapter 2

[sticks as weapons](#) Jill D. Pruetz and Paco Bertolani (2007), “Savanna Chimpanzees, *Pan troglodytes verus*, Hunt with Tools,” *Current Biology*, 17:412–17.

[using rocks](#) Giacomo Bernardi (2011), “The Use of Tools by Wrasses (*Labridae*),” *Coral Reefs*, published online before print.

[Brants' whistling rat](#) Tim P. Jackson (2000), “Adaptation to Living in an Open Arid Environment: Lessons from the Burrow Structure of the Two Southern African Whistling Rats, *Parotomys brantsii* and *P. littledalei*,” *Journal of Arid Environments*, 46:345–55.

[African rat](#) Jonathan Kingdon, Bernard Agwanda, Margaret Kinnaird, Timothy O'Brien, Christopher Holland, Thomas Gheysens, Maxime Boulet-Audet, and Fritz Vollrath (2011), “A Poisonous Surprise under the Coat of the African Crested Rat,” *Proceedings of the Royal Society B: Biological Sciences*, published online before print.

[entirely separate](#) R. Jansen, J.D. Embden, W. Gaastra, L.M. Schouls (2002), “Identification of Genes That Are Associated with DNA Repeats in Prokaryotes,” *Molecular Microbiology*, 43:1565–75.

[earlier book](#) Bruce Schneier (2006), *Beyond Fear: Thinking Sensibly About Security in an Uncertain World*, Copernicus.

[picture of a snake](#) Vanessa LoBue and Judy DeLoache (2008), “Detecting the Snake in the Grass: Attention to Fear-Relevant Stimuli by Adults and Young Children,” *Psychological Science*, 19:284–9.

[cause and effect](#) Gema Martin-Ordas, Josep Call, and Fernando Colmenares (2007), “Tubes, Tables, and Traps: Great Apes Solve Two Functionally Equivalent Trap Tasks but Show No Evidence of Transfer Across Tasks,” *Animal Cognition*, 11:423–30.

[time binding species](#) Alfred Korzybski (1933), *Science and Sanity: An Introduction to Non-Aristotelian Systems and General Semantics*, International Non-Aristotelian Library Publishing Corp.

[intentional stance](#) Daniel C. Dennett (1987), *The Intentional Stance*, MIT Press.

[social group size](#) Kimberly A. Pollard and Daniel T. Blumstein (2011), “Social Group Size Predicts the Evolution of Individuality,” *Current Biology*, 21:413–7.

[win arguments](#) Hugo Mercier and Dan Sperber (2011), “Why Do Humans Reason? Arguments for an Argumentative Theory,” *Behavioral & Brain Sciences*, 34:54–74.

[Others posit](#) Christopher McCarty, Peter D. Killworth, H. Russell Bernard, Eugene C. Johnsen, and Gene A. Shelley (2000), “Comparing Two Methods for Estimating Network Size,” *Human Organization*, 60:28–39. H. Russell Bernard, Gene Ann Shelley, and Peter Killworth (1987), “How Much of a Network Does the GSS and RSW Dredge Up?” *Social Networks*, 9:49–63.

[primitive peoples](#) Mervyn J. Meggitt (1977), *Blood Is Their Argument*, Mayfield.

[Yanomamö](#) Napoleon A. Chagnon (1974), *Studying the Yanomamo*, Holt, Rinehart & Winston.

[Big-game hunting](#) David A. Byers and Andrew Ugan (2005), “Should We Expect Large Game Specialization in the Late Pleistocene? An Optimal Foraging Perspective on Early Paleoindian Prey Choice,” *Journal of Archaeological Science*, 32:1624–40. Kristen Hawkes, James F. O'Connell, and Nicholas G. Blurton-Jones (1991), “Hunting Income Patterns among the Hadza: Big Game, Common Goods, Foraging Goals and the Evolution of the Human Diet,” *Philosophical Transactions of the Royal Society B: Biological Sciences*, 33:243–50. John D. Speth, Khori Newlander, Andrew A. White, Ashley K. Lemke, and Lars E. Anderson (2010), “Early Paleoindian Big-Game Hunting in North America: Provisioning or Politics?” *Quaternary International*, published online before print. Mary C. Stiner, Natalie D. Munro, and Todd A. Surovell (2000), “The Tortoise and the Hare: Small-Game Use, the Broad-Spectrum Revolution, and Paleolithic Demography,” *Current Anthropology*, 41: 39–73.

[Chimpanzees' aggression rates](#) Richard W. Wrangham, Michael L. Wilson, and Martin N. Muller (2006), “Comparative Rates of Violence in Chimpanzees and Humans,” *Primates*, 47:14–26.

## Chapter 3



[increased specialization](#) Raphaël Jeanson, Jennifer H. Fewell, Root Gorelick, and Susan M. Bertram (2007), "Emergence of Increased Division of Labor as a Function of Group Size," *Behavioral Ecology & Sociobiology*, 62:289–98.

[not what makes](#) Anna Dornhaus (2008), "Specialization Does Not Predict Individual Efficiency in an Ant," *PLOS Biology*, 6:e285.

[startling statistic](#) Dwayne C. Savage (1977), "Microbial Ecology of the Gastrointestinal Tract," *Annual Review of Microbiology*, 31:107–33.

[some mixture](#) Stephen Le and Robert Boyd (2007), "Evolutionary Dynamics of the Continuous Iterated Prisoner's Dilemma," *Journal of Theoretical Biology*, 245:258–67.

[population density](#) Pierre Auger and Dominique Pontier (1998), "Fast Game Theory Coupled to Slow Population Dynamics: The Case of Domestic Cat Populations," *Mathematical Biosciences*, 148:65–82.

[South African meerkats](#) Tim H. Clutton-Brock, Peter N.M. Brotherton, M. Justin O'Riain, Ashleigh S. Griffin, David Gaynor, Ruth Kansky, Lynda Sharpe, and Grant M. McIlrath (2001), "Contributions to Cooperative Rearing in Meerkats," *Animal Behaviour*, 61:705–10. Alex Thornton (2008), "Social Learning about Novel Foods in Young Meerkats," *Animal Behaviour*, 76:1411–21.

[Red ruffed lemurs](#) Natalie Vasey (2007), "The Breeding System of Wild Red Ruffed Lemurs (*Varecia rubra*): A Preliminary Report," *Primates*, 48:41–54.

[much less common](#) Lee Alan Dugatkin (1997), *Cooperation Among Animals: An Evolutionary Perspective*, Oxford University Press.

[also slow](#) Carl T. Bergstrom and Michael Lachmann (2003), "The Red King Effect: Evolutionary Rates and the Division of Surpluses in Mutualisms," in Peter Hammerstein, ed., *Genetic and Cultural Evolution of Cooperation*, MIT Press, 223–8.

[Wrasse cleaner fish](#) Frans de Waal (Apr 2005), "How Animals Do Business," *Scientific American*, 72–79.

[Elephant seals](#) Burney J. Le Boeuf (1974), "Male-Male Competition and Reproductive Success in Elephant Seals," *American Zoologist*, 14:163–76.

[some bullfrogs](#) Richard D. Howard (1978), "The Evolution of Mating Strategies in Bullfrogs, *Rana catesbeiana*," *Evolution*, 32:850–71.

[everyone is a dove](#) Valerius Geist (1974), "On the Relationship of Social Evolution and Ecology in Ungulates," *American Zoologist*, 14:205–20.

[there is a mixture](#) John Maynard Smith and Geoffrey A. Parker (1976), "The Logic of Asymmetric Contests," *Animal Behaviour*, 24:159–75. Peter Hammerstein (1981), "The Role of Asymmetries in Animal Contests," *Animal Behaviour*, 29:193–205.

[Kaushik Basu](#) Kaushik Basu (1984), *The Less-Developed Economy: A Critique of Contemporary Theory*, Oxford University Press, 5–6.

[Neuroscience is starting](#) Kerri Smith (2011), "Neuroscience vs Philosophy: Taking Aim at Free Will," *Nature*, 477:23–5.

[Ultimatum game](#) Charles A. Holt (2000), "Y2K Bibliography of Experimental Economics and Social Science: Ultimatum Game Experiments," University of Virginia. Hessel Oosterbeek, Randolph Sloof, and Gijs van de Kuilen (2004), "Cultural Differences in Ultimatum Game Experiments: Evidence From a Meta-Analysis," *Experimental Economics*, 7:171–88.

[how the game works](#) Werner Güth, Rolf Schmittberger, and Bernd Schwarze (1982), "An Experimental Analysis of Ultimatum Bargaining," *Journal of Economic Behavior & Organization*, 3:267–88.

[turn down offers](#) Hessel Oosterbeek, Randolph Sloof, and Gijs van de Kuilen (2004), "Differences in Ultimatum Game Experiments: Evidence from a Meta-Analysis," *Experimental Economics*, 7:171–88.

[cultural backgrounds](#) Donna L. Bahry (2004), "Trust in Transitional Societies: Experimental Results from Russia," Paper presented at the American Political Science Association Meeting, Chicago. Michael Gurven and Jeffrey Winking (2008), "Collective Action in Action: Prosocial Behavior In and Out of the Laboratory," 110:179–90. Joseph Henrich (2000), "Does Culture Matter in Economic Behavior? Ultimatum Game Bargaining Among the Machiguenga of the Peruvian Amazon," *American Economic Review*, 90:973–9. Joseph Henrich, Robert Boyd, Samuel Bowles, Colin Camerer, Ernst Fehr, Herbert Gintis, Richard McElreath, Michael Alvard, Abigail Barr, Jean Ensminger, Kim Hill, Francisco Gil-White, Michael Gurven, Frank Marlowe, John Q. Patton, Natalie Smith, and David Tracer (2005), "'Economic Man' in Cross-Cultural Perspective: Behavioral Experiments in 15 Small-Scale Societies," *Behavioral & Brain Sciences*, 28:795–855. Joseph Henrich, Richard McElreath, Abigail Barr, Jean Ensminger Clark Barrett, Alexander Bolyanatz, Juan Camilo Cardenas, Michael Gurven, Edwins Gwako, Natalie Henrich, Carolyn Lesorogol, Frank Marlowe, David Tracer, and John Ziker (2006), "Costly Punishment Across Human Societies," *Science*, 312:1767–70.

[large amounts of money](#) Juan Camilo Cardenas and Jeffrey P. Carpenter (2005), "Experiments and Economic Development: Lessons from Field Labs in the Developing World," Middlebury College Economics Discussion Paper No. 0505.

[more lopsided](#) Daniel Kahneman, John L. Knetsch, and Richard H. Thaler (1986), "Fairness and the Assumptions of Economics," *Journal of Business*, 59:S285–S300. Christoph Engel (2011), "Dictator Games: A Meta Study," *Experimental Economics*, 14:584–610.

[Trust game](#) Joyce Berg, John Dickhaut, and Kevin McCabe (1995), "Trust, Reciprocity, and Social History," *Games & Economic Behavior*, 10:122–42.

[not what happens](#) Colin Cramer (2003), *Behavioral Game Theory: Experiments in Strategic Interaction*, Russell

Sage Foundation.

[Public Goods game](#) John O. Ledyard (1995), "Public Goods: A Survey of Experimental Research," in Alvin E. Roth and John H. Kagel, eds., *Handbook of Experimental Economics*, Princeton University Press.

[fear of rejection](#) Daniel Kahneman, John L. Knetsch, and Richard H Thaler (1986), "Fairness and the Assumptions of Economics," *Journal of Business*, 59:S285–S300. Joseph Henrich, Robert Boyd, Samuel Bowles, Colin Camerer, Ernst Fehr, Herbert Gintis, Richard McElreath, Michael Alvard, Abigail Barr, Jean Ensminger, Kim Hill, Francisco Gil-White, Michaela Curven, Frank Marlowe, John Q. Patton, Natalie Smith, and David Tracer (2005), "'Economic Man' in Cross-Cultural Perspective: Behavioral Experiments in 15 Small-Scale Societies," *Behavioral & Brain Sciences*, 28:795–855.

[Some researchers claim](#) Ernst Fehr and Urs Fischbacher (2005), "Human Altruism: Proximate Patterns and Evolutionary Origins," *Analyse & Kritik*, 27:6–47.

[Others claim](#) Roland Bénabou and Jean Tirole (2006), "Incentives and Prosocial Behavior," *American Economic Review*, 96:1652–78. Amihai Glazer and Kai A. Konrad (1996) "A Signaling Explanation for Charity," *American Economic Review*, 86:1019–28. Dan Ariely, Anat Bracha, and Stephan Meier (2008), "Doing Good or Doing Well? Image Motivation and Monetary Incentives in Behaving Prosocially," Federal Reserve Bank of Boston Working Paper No. 07–9.

[fair solutions](#) Gary E. Bolton, Elena Katok, and Rami Zwick (1998), "Dictator Game Giving: Rules of Fairness Versus Acts of Kindness," *International Journal of Game Theory*, 27:269–99.

[do what was fair](#) Joseph Henrich, Robert Boyd, Samuel Bowles, Colin Camerer, Ernst Fehr, Herbert Gintis, Richard McElreath, Michael Alvard, Abigail Barr, Jean Ensminger, Kim Hill, Francisco Gil-White, Michaela Curven, Frank Marlowe, John Q. Patton, Natalie Smith, and David Tracer (2005), "'Economic Man' in Cross-Cultural Perspective: Behavioral Experiments in 15 Small-Scale Societies," *Behavioral & Brain Sciences*, 28:795–855.

[act of skill](#) Elizabeth Hoffman, Kevin McCabe, Keith Shachat, and Vernon L. Smith (1994), "Preferences, Property Rights, and Anonymity in Bargaining Games," *Games & Economic Behavior*, 7:346–80.

[other way, too](#) Bradley J. Ruffle (1998), "More Is Better, But Fair Is Fair: Tipping in Dictator and Ultimatum Games," *Games & Economic Behavior*, 23:247–76.

[punish other players](#) Christopher T. Dawes, James H. Fowler, Tim Johnson, Richard McElreath, and Oleg Smirnov (2007), "Egalitarian Motivations in Humans," *Nature*, 446:794–6.

[the punishment works](#) Ernst Fehr and Simon Gächter (2002), "Altruistic Punishment in Humans," *Nature*, 415:137–40. James H. Fowler and Nicholas A. Christakis (2010), "Cooperative Social Behavior Cascades in Human Social Networks," *PNAS Early Edition*.

[results are mixed](#) David Rand, Anna Dreber, Tore Ellingsen, Drew Fudenberg, and Martin Nowak (2009), "Positive Interactions Promote Public Cooperation," *Science*, 325:1272–5. Christopher T. Dawes, James H. Fowler, Tim Johnson, Richard McElreath, and Oleg Smirnov (2007), "Egalitarian Motivations in Humans," *Nature*, 446:794–6. James Andreoni, William Harbaugh, and Lise Vesterlund (2003), "The Carrot or the Stick: Rewards, Punishments, and Cooperation," *The American Economic Review*, 93:893–902.

[game is about taking](#) Nicholas Bardsley (2008), "Dictator Game Giving: Altruism or Artifact?" *Experimental Economics*, 11:122–33.

[Distrust game](#) Iris Bohnet and Stephan Meier (2005), "Deciding to Distrust," Federal Reserve Bank of Boston Public Policy Discussion Paper 05–4.

[half of the money](#) Ernst Fehr and Klaus M. Schmidt (1999), "A Theory of Fairness, Competition, and Cooperation," *The Quarterly Journal of Economics*, 114:817–68. Daniel Kahneman, John L. Knetsch, and Richard H Thaler (1986), "Fairness and the Assumptions of Economics," *Journal of Business*, 59:S285–S300.

[who are skeptical](#) Ilan Dinstein, Cibu Thomas, Marlene Behrmann, and David J. Heeger (2008), "A Mirror Up to Nature," *Current Biology*, 18:R13–8. Kaspar Meyer and Antonio Damasio (2008), "Mirror Neurons: Behind the Looking Glass," *Nature*, 454:167–8. Gregory Hickok (2009), "Eight Problems for the Mirror Neuron Theory of Action Understanding in Monkeys and Humans," *Cognitive Neurosciences*, 21:1229–43.

[prototype effect](#) Eleanor Rosch (1975), "Cognitive Representation of Semantic Categories," *Journal of Experimental Psychology*, 104:192–233. George Lakoff (1987), *Women, Fire and Dangerous Things: What Categories Reveal About the Mind*, University of Chicago Press.

[In many societies](#) Rebecca L. Bliege Bird and Douglas W. Bird (1997), "Delayed Reciprocity and Tolerated Theft: The Behavioral Ecology of Food-Sharing Strategies," *Current Anthropology*, 38:49–78. Serge Bahuchet (1990), "Food Sharing Among the Pygmies of Central Africa," *African Study Monographs*, 11:27–53. Catherline Feeley (2011), "The Host's Dilemma: Game Theory and Homeric Hospitality," Classical Association of Canada Annual Meeting, Vancouver, Canada, 11 May 2002, unpublished conference paper.

[majority belief](#) Martin A. Nowak, Corina E. Tarnita, and Edward O. Wilson (2010), "The Evolution of Eusociality," *Nature*, 466:1057–62.

[One rebuttal](#) Patrick Abbot, Jun Abe, John Alcock, et al. (2011), "Inclusive Fitness Theory and Eusociality," *Nature*, 471:E1–4.

[reinforced each other](#) Robert Wright (1994), *The Moral Animal: The New Science of Evolutionary Psychology*, Pantheon Books, 201–2.

[many books published](#) Michael Shermer (2004), *The Science of Good and Evil: Why People Cheat, Gossip, Care, Share, and Follow the Golden Rule*, Times Books. Nigel Barber (2004), *Kindness in a Cruel World: The Evolution of Altruism*, Prometheus Books. Donald W. Pfaff (2007), *The Neuroscience of Fair Play: Why We (Usually) Follow the Golden Rule*, Dana Press. Martin A. Nowak and Roger Highfield (2011), *SuperCooperators: Altruism, Evolution*,

and *Why We Need Each Other to Succeed*, Free Press. Patricia S. Churchland (2011), *Braintrust: What Neuroscience Tells Us About Morality*, Princeton University Press.

[older book](#) Matt Ridley (1996), *The Origins of Virtue*, Viking.

## Chapter 4

[evolutionary psychology](#) Edward O. Wilson (1975), *Sociobiology: The New Synthesis*, Harvard University Press. Edward O. Wilson (1978), *On Human Nature*, Harvard University Press.

[genetic science is flawed](#) Anne Innis Dagg (2004), *“Love of Shopping” Is Not a Gene: Problems with Darwinian Psychology*, Black Rose Books.

[Douglass North](#) Douglass C. North (1990), *Institutions, Institutional Change, and Economic Performance*, Cambridge University Press, 54.

[no money would](#) David Graeber (2011), *Debt: The First 5,000 Years*, Melville House.

[Terrence Deacon](#) Terrence W. Deacon (1997), *The Symbolic Species: The Co-Evolution of Language and the Human Brain*, W.W. Norton & Co., 384–401.

[far more philandering](#) Simon C. Griffith, Ian P. Owens, and Katherine A. Thuman (2002), “Extra Pair Paternity in Birds: A Review of Interspecific Variation and Adaptive Function,” *Molecular Ecology*, 11:2195–212. Anna Dubiec (2009), “Avian Infidelity,” *Research in Progress: Behavioral Ecology*, 3:32–4.

[There's a balance](#) Thomas D. Berger and Erik Trinkaus (1995), “Patterns of Trauma Among the Neanderthals,” *Journal of Archaeological Science*, 22:841–52. Daniel S. Adler, Guy Bar-Oz, Anna Belfer-Cohen, and Ofer Bar-Yosef (2006), “Ahead of the Game: Middle and Upper Palaeolithic Hunting Behaviors in the Southern Caucasus,” *Current Anthropology*, 47:89–118. Penny Spikins, Holly Rutherford, and Andy Needham (2010), “From Homininity to Humanity: Compassion from the Earliest Archaic to Modern Humans,” *Time & Mind*, 3:303–25.

[preliminary evidence](#) Carles Lalueza-Fox, Antonio Rosas, Almudena Estalrich, Elena Gigli, Paula F. Campos, Antonio García-Taberner, Samuel García-Vargas, Federico Sánchez-Quinto, Oscar Ramírez, Sergi Civit, Markus Bastir, Rosa Huguet, David Santamaría, M. Thomas P. Gilbert, Eske Willerslev, and Marco de la Rasilla (2011), “Genetic Evidence for Patrilocal Mating Behavior Among Neanderthal Groups,” *Proceedings of the National Academy of Sciences of the United States of America*, 108:250–3.

[military organization](#) Wei-Xing Zhou, Didier Sornette, Russell A. Hill, and Robin I.M. Dunbar (2005), “Discrete Hierarchical Organization of Social Group Sizes,” *Proceedings of the Royal Society B: Biological Sciences*, 272:439–44.

[origins of religion](#) Scott Atran (2004), *In Gods We Trust: The Evolutionary Landscape of Religion*, Oxford. Pascal Boyer (2002), *Religion Explained: The Evolutionary Origins of Religious Thought*, Basic Books. David Sloan Wilson (2003), *Darwin's Cathedral: Evolution, Religion, and the Nature of Society*, University of Chicago Press. Lewis Wolpert (2007), *Six Impossible Things Before Breakfast: The Evolutionary Origins of Belief*, Norton.

[social controls](#) Edward Alsworth Ross (1896), “Social Control,” *The American Journal of Sociology*, 1:513–35.

[not using that term](#) Mathieu Deflem (2007), “The Concept of Social Control: Theories and Applications,” paper presented at the International Conference on Charities as Instruments of Social Control in Nineteenth-Century Britain, Université de Haute Bretagne (Rennes 2), Rennes, France, November 22–23.

[not growing](#) Zeynep Tufekci (2008), “Grooming, Gossip, Facebook and Myspace,” *Information, Communication & Society*, 11:544–64. Bruno Gonçalves, Nicola Perra, and Alessandro Vespignani (2011), “Validation of Dunbar's Number in Twitter Conversations,” *PLoS ONE*, 6:e22656. *The Economist* (26 Feb 2009), “Primates on Facebook: Even Online, the Neocortex Is the Limit.”

[certain brain regions](#) Ryota Kanai, Bahador Bahrami, Rebecca Roylance, and Geraint Rees (2011), “Online Social Network Size Is Reflected in Human Brain Structure,” *Proceedings of the Royal Society B: Biological Sciences*, published online before print.

## Chapter 5

[Prisoner's Dilemma](#) Merrill M. Flood (1952), “Some Experimental Games,” Research Memorandum RM 789–1, The RAND Corporation. Republished as: Merrill M. Flood (1958), “Some Experimental Games,” *Management Science*, 5:5–26. Albert W. Tucker (1980), “A Two-Person Dilemma,” *UMAP Journal*, 1:101–3. Albert W. Tucker (1983), “The Mathematics of Tucker: A Sampler,” *The Two-Year College Mathematics Journal*, 14:228–32.

[Many researchers](#) Sylvia Nasar (2001), *A Beautiful Mind: The Life of Mathematical Genius and Nobel Laureate John Nash*, Simon & Schuster. John Nash (2008), “The Agencies Method for Modeling Coalitions & Cooperations in Games,” *International Game Theory Review*, 10:539–64. Robert Axelrod and William D. Hamilton (1981), “The Evolution of Cooperation,” *Science*, 211:1390–6. Robert Axelrod (1984), *The Evolution of Cooperation*, Basic Books.

[open grazing pasture](#) Garrett Hardin (1968), “The Tragedy of the Commons,” *Science*, 162:1243–8.

## Chapter 6

[predictably irrational](#) Dan Ariely (2008), *Predictably Irrational: The Hidden Forces That Shape our Decisions*, Harper Perennial.

[Cuban Missile Crisis](#) Steven J. Brams (24 Jan 2001), “Game Theory and the Cuban Missile Crisis,” *Plus*



Magazine.

[worst in people](#) Morton Deutsch and Robert M. Krauss (1960), "The Effect of Threat upon Interpersonal Bargaining," *Journal of Abnormal & Normal Social Psychology*, 61:181–9.

[better model](#) Rolf Kümmerli, Caroline Colliard, Nicolas Fiechter, Blaise Petitpierre, Flavien Russier, and Laurent Keller (2007), "Human Cooperation in Social Dilemmas: Comparing the Snowdrift Game with the Prisoner's Dilemma," *Proceedings of the Royal Society B: Biological Sciences*, 274:2965–70.

[Prospect Theory](#) Daniel Kahneman and Amos Tversky (1979), "Prospect Theory: An Analysis of Decision under Risk," *Econometrica*, 47:263–92.

[systems of regulation](#) Susan Jane Buck Cox (1985), "No Tragedy on the Commons," *Environmental Ethics*, 7:49–62.

[superrationality](#) Douglas Hofstadter (1985), *Metamagical Themas*, Bantam Dell Publishing Group.

[collectively rational](#) Anatol Rapoport, ed. (1974), *Game Theory as a Theory of Conflict Resolution*, Reidel Publishing Co.

[four different modalities](#) Lawrence Lessig (1998), "The New Chicago School," *The Journal of Legal Studies*, 27:661–91. Lawrence Lessig (2000), *Code and Other Laws of Cyberspace*, Basic Books.

[three basic flavors](#) Steven D. Levitt and Stephen J. Dubner (2006), *Freakonomics: A Rogue Economist Explores the Hidden Side of Everything*, Morrow, 17.

## Chapter 7

[the same analysis](#) Ilya Somin (2006), "Knowledge about Ignorance: New Directions in the Study of Political Information," *Critical Review*, 18:255–78.

[related to other](#) James H. Fowler (2006), "Altruism and Turnout," *Journal of Politics*, 68:674–83. James H. Fowler and Cindy D. Kam (2007), "Beyond the Self: Altruism, Social Identity, and Political Participation," *Journal of Politics*, 69:811–25. James H. Fowler and Christopher T. Dawes (2008), "Two Genes Predict Voter Turnout," *Journal of Politics*, 70:579–94.

[not distinguishing](#) Mark Johnson (1993), *Moral Imagination: Implications of Cognitive Science for Ethics*, University of Chicago Press.

[National Voter Turnout](#) Demos (2009), "Demos Fact Sheet: Election Day Registration."

[significant difference](#) Stephen Anderson (2009), "The Golden Rule: Not So Golden Anymore," *Philosophy Now*, 74:26–9.

[Chácobo of Bolivia](#) Gilbert R. Prost (1983) "Chácobo: Society of Equality," unpublished manuscript, Department of Anthropology, University of Florida; quoted in Michael Gurven (2004), "To Give and to Give Not: The Behavioral Ecology of Human Food Transfers," *Behavioral & Brain Sciences*, 27:543–59.

[Maori of New Zealand](#) Raymond Firth (1926), "Proverbs in Native Life, with Special Reference to Those of the Maori," *Folklore*, 37:134–53.

[Yeyi of Botswana](#) Alistair J. Sutherland (1981), "Local Level Dispute Processes in Botswana: The Yeyi Moot Encapsulated," *Journal of African Law*, 25:94–114.

[believe in free will](#) Kathleen D. Vohs and Jonathan W. Schooler (2008), "The Value of Believing in Free Will: Encouraging a Belief in Determinism Increases Cheating," *Psychological Science*, 19:49–54

[believe in predestination](#) Tyler F. Stillman, Roy F. Baumeister, Kathleen D. Vohs, Nathaniel M. Lambert, Frank D. Fincham, and Lauren E. Brewer (2010), "Personal Philosophy and Personnel Achievement: Belief in Free Will Predicts Better Job Performance," *Social Psychological & Personality Science*, 1:43–50.

[concept of free will](#) Shaun Nichols (2011), "Experimental Philosophy and the Problem of Free Will," *Science*, 331:1401–3.

[Inbreeding is likely](#) M. Menotti-Raymond and S.J. O'Brien (1993), "Dating the Genetic Bottleneck of the African Cheetah," *Proceedings of the National Academy of Sciences of the United States of America*, 90:3172–6. William Amos and John Harwood (1998), "Factors Affecting Levels of Genetic Diversity in Natural Populations," *Philosophical Transactions of the Royal Society B*, 353:177–86. Mary Jane McKay (11 Feb 2009), "Genetic Disorders Hit Amish Hard," *CBS News*.

[isolated from modern](#) Joseph Henrich (2000), "Does Culture Matter in Economic Behavior? Ultimatum Game Bargaining Among the Machiguenga of the Peruvian Amazon," *American Economic Review*, 90:973–9.

[wash their hands](#) John M. Lynn (2000), "Method and Apparatus for Helping to Ensure the Washing of Hands," U.S. Patent #6,031,461. John M. Lynn (2000), "Method and Apparatus for Helping to Ensure the Washing of Hands," U.S. Patent #6,147,607. Fiona A. Lynn and John M. Lynn (2001), "Method and Apparatus for Helping to Ensure the Washing of Hands," U.S. Patent #6,211,788.

[broken windows theory](#) James Q. Wilson and George L. Kelling (Mar 1982), "Broken Windows," *Atlantic Monthly*, 127:29–38. George L. Kelling (17 Jul 2009), "How New York Became Safe: The Full Story," *City Journal*.

[Researchers compared](#) Khaled Taqi-Eddin and Dan Macallair (1999), "Shattering Broken Windows: An Analysis of San Francisco's Alternative Crime Policies," Justice Policy Institute. Randall G. Sheldon (2003), "Assessing 'Broken Windows': A Brief Critique," Center on Juvenile & Criminal Justice. Bernard E. Harcourt and Jens Ludwig (2006), "Broken Windows: New Evidence from New York City and a Five-City Social Experiment," *University of Chicago Law Review*, 73:271–320.

[evidence that it does](#) Kees Keizer, Siegwart Lindenberg, and Linda Steg (2008), "The Spreading of Disorder,"

Science, 322:1681–5.

[Steven Levitt](#) Steven D. Levitt (2004), “Understanding Why Crime Fell in 1990’s: Four Factors that Explain the Decline and Six that Do Not,” *Journal of Economic Perspectives*, 18:163–90.

[reduced their energy](#) Ian Ayres, Sophie Raseman, and Alice Shih (2009), “Evidence from Two Large Field Experiments That Peer Comparison Feedback Can Reduce Residential Energy Usage,” NBER Working Paper 15386, National Bureau of Economic Research.

[this system backfires](#) Dora L. Costa and Matthew E. Kahn (2010), “Energy Conservation ‘Nudges’ and Environmentalist Ideology: Evidence from a Randomized Residential Electricity Field Experiment,” NBER Working Paper No. 15939, National Bureau of Economic Research.

[people are swayed](#) Matt Davis (2011), “Behavior and Energy Savings: Evidence from a Series of Experimental Interventions,” Environmental Defense Fund.

[In Rwanda](#) Heather B. Hamilton (2000), “Rwanda’s Women: The Key to Reconstruction,” *Journal of Humanitarian Assistance*.

[cash box was made](#) Stephen J. Dubner and Steven D. Levitt (6 Jun 2004), “What the Bagel Man Saw: An Accidental Glimpse at Human Nature,” *New York Times Magazine*, 62–5.

[a host of unknowns](#) Steven D. Levitt (2006) “White-Collar Crime Writ Small: A Case Study of Bagels, Donuts, and the Honor System,” *The American Economic Review*, 96:290–4.

## Chapter 8

[People who defect](#) James E. Alcock and Diana Mansell (1977), “Predisposition and Behaviour in a Collective Dilemma,” *Journal of Conflict Resolution*, 21:443–57.

[better at predicting](#) Robert H. Frank (1988), *Passions within Reason: The Strategic Role of the Emotions*, W.W. Norton & Co., 137–43.

[better at recognizing](#) Harold H. Kelly and Anthony J. Stahelski (1970), “Errors in Perception of Intentions in a Mixed-Motive Game,” *Journal of Experimental Social Psychology*, 6:279–400.

[Robert Axelrod](#) Robert Axelrod (1984), *The Evolution of Cooperation*, Basic Books.

[oft-quoted line](#) Pete Blackshaw (2008), *Satisfied Customers Tell Three Friends, Angry Customers Tell 3,000*, Crown Business.

[cooperation jumps](#) Claus Wedekind and Manfred Milinski (1996), “Human Cooperation in the Simultaneous and the Alternating Prisoner’s Dilemma: Pavlov Versus Generous Tit-for-Tat,” *Proceedings of the National Academy of Sciences of the United States of America*, 93:2686–9.

[Dueling isn’t always](#) Christopher Kingston and Robert E. Wright (2009), “The Deadliest of Games: The Institution of Dueling,” *Southern Economic Journal*, 76:1094–1106. Diego Gambetta (2009), *Codes of the Underworld: How Criminals Communicate*, Princeton University Press.

[Chimpanzees are able](#) Francys Subaiul, Jennifer Vonk, Sanae Okamoto-Barth, and Jochen Barth (2008), “Do Chimpanzees Learn Reputation by Observation? Evidence from Direct and Indirect Experience with Generous and Selfish Strangers,” *Animal Cognition*, 11:611–23.

[Charles Lamb](#) Charles Lamb (1833), “Table-Talk by the Late Elia,” in Edward Verrall Lucas, ed. (1913), *The Works of Charles and Mary Lamb: Miscellaneous Prose, 1798–1834*, Macmillan, 400.

[counter-evidence](#) Francisco C. Santos, Marta D. Santos, Jorge M. Pacheco (2008), “Social Diversity Promotes the Emergence of Cooperation in Public Goods Games,” *Nature*, 454:213–6. Sven Van Segbroeck, Francisco C. Santos, Tom Lenaerts, Jorge M. Pacheco (2009), “Reacting Differently to Adverse Ties Promotes Cooperation in Social Networks,” *Physical Review Letters*, 102:058105–9.

[diverse communities](#) Eric M. Uslaner (2002), *The Moral Foundations of Trust*, Cambridge University Press. Eric M. Uslaner (2004), “Trust and Social Bonds: Faith in Others and Policy Outcomes Reconsidered,” *Political Research Quarterly*, 57:501–7. Eric M. Uslaner (2011), “Trust, Diversity, and Segregation in the United States and the United Kingdom,” *Comparative Sociology*, 10:221–47.

[different dialects](#) Ottar Tinglum (1929), “Landsmaal-Riksmaal: The Feud Between the Dialects and the Official Language of Norway,” *American Journal of Sociology*, 34:686–92.

[English dialects](#) Sally Johnson, Tommaso M. Milani, and Clive Upton (2008), “Whose Voices? A Hypermodal Approach to Language Ideological Debates on the BBC ‘Voices’ Website,” Working Paper No. 127, Lancaster University Department of Linguistics and English Language Centre for Language in Social Life. Clive Upton and John David Allison Widdowson (2006), *An Atlas of English Dialects*, Oxford University Press.

[David Nettle ran](#) David Nettle (1999), *Linguistic Diversity*, Oxford University Press.

[alternate analysis](#) Brian Skyrms (1996), *The Evolution of the Social Contract*, Cambridge University Press, 57–61.

[“is” does not imply](#) David Hume (1739), *A Treatise on Human Nature*.

[costly religious rituals](#) William Irons (1996), “Morality as an Evolved Adaptation,” in J.P. Hurd, ed., *Investigating the Biological Foundations of Morality*, Edwin Mellen Press, 1–34. William Irons (2001), “Religion as a Hard-to-Fake Sign of Commitment,” in Randolph Nesse, ed., *The Evolution of Commitment*, Russell Sage Foundation, 155–78. Richard Sosis (2000), “Religion and Intra-Group Cooperation: Preliminary Results of a Comparative Analysis of Utopian Communities,” *Cross-Cultural Research*, 37:211–39.

[breeding females](#) James Acheson and Roy Gardner (2011), “The Evolution of the Maine Lobster V-Notch Practice: Cooperation in a Prisoner’s Dilemma Game,” *Ecology & Society*, 16:41.

[Edney listed several](#) Julian J. Edney (1981), "Paradoxes on the Commons: Scarcity and the Problem of Inequality," *Journal of Community Psychology*, 9:3–34.

[Michel Foucault said](#) Didier Eribon (1991), *Michel Foucault*, translated from French by Betsy Wing, Harvard University Press, 265.

## Chapter 9

[similar system in Sweden](#) Heather Monasky (2011), "On Comprehensive Prostitution Reform: Criminalizing the Trafficker and the Trick, But Not the Victim—Sweden's Sexköpslagen in America," *William Mitchell Law Review*, 37:101–56.

[driving skill is better](#) Justin Kruger and David Dunning (1999), "Unskilled and Unaware of It: How Difficulties in Recognizing One's Own Incompetence Lead to Inflated Self-Assessments," *Journal of Personality & Social Psychology*, 77:1121–34. Corey L. Guenther and Mark D. Alicke (2010), "Deconstructing the Better-Than-Average Effect," *Journal of Personality & Social Psychology*, 99:755–70.

[Electronic filing](#) U.S. Internal Revenue Service (8 Jul 2009), "Update on Reducing the Federal Tax Gap and Improving Voluntary Compliance," Department of the Treasury. Barbara Weltman (24 Jan 2011), "Ten Ways to Avoid a Tax Audit," *Wall Street Journal*.

[Students perform better](#) Uri Gneezy and Aldo Rustichini (2000), "Pay Enough or Don't Pay at All," *Quarterly Journal of Economics*, 115:791–810.

[salary bonuses](#) Randall Eberts, Kevin Hollenbeck, and Joe Stone (2002), "Teacher Performance Incentives and Student Outcomes," *Journal of Human Resources*, 37:913–27.

[Ostrom's original rules are](#) Elinor Ostrom (1980), *Governing the Commons: The Evolution of Institutions for Collective Action*, Cambridge University Press.

[Jeremy Bentham](#) Jeremy Bentham (1789), *An Introduction to the Principles of Morals and Legislation*.

[Gary Becker](#) Gary Becker (1996), "The Economic Way of Looking at Human Behavior: The Nobel Lecture," *Journal of Political Economy*, 101:385–409.

[increasing the probability](#) Mark Kleinman (2009), *When Brute Force Fails: How to Have Less Crime and Less Punishment*, Princeton University Press.

[conflicting evidence](#) Nina Mazar and Dan Ariely (2006), "Dishonesty in Everyday Life and Its Policy Implications," *Journal of Public Policy & Marketing*, 25:117–26.

[two Irish subsidiaries](#) Joseph B. Darby III and Kelsey Lemaster (15 May 2007), "Double Irish More than Doubles the Tax Savings," *Practical US/International Tax Strategies*, 11:2,11–16.

[bigger one opened up](#) Todd Neeley (28 Mar 2011), "Pulp, Paper Companies Amend Tax Returns Actions Could Cost Taxpayers Billions of Dollars," *DTN: The Progressive Farmer*.

## Chapter 10

[someone was sentenced](#) Barbara de Lollis (15 Sep 2010), "Woman Faces Three Months in Jail for Stealing Hotel Towels," *USA Today*.

[doping in professional Scrabble](#) Stefan Fatiss (2001), *Word Freak: Heartbreak, Triumph, Genius, and Obsession in the World of Competitive Scrabble Players*, Houghton Mifflin Harcourt.

[assays were developed](#) John H. Lewis (1979), "A Routine Screening Method for the Major Metabolite of Methyl Phenidate in the Urine of Greyhounds," *Forensic Science International*, 14:221–7. Orisa J. Igwe and Jerry W. Blake (1981), "Gas/Liquid Chromatographic Analysis of Pemoline in Biological Fluids Using Electron Capture Detection," *Journal of Chromatographic Science*, 19:617–24.

[EPO use became](#) Robin Parisotto, Christopher J. Gore, Kerry R. Emslie, Michael J. Ashenden, Carlo Brugnara, Chris Howe, David T. Martin, Graham J. Trout, and Allan G. Hahn (2000), "A Novel Method Utilising Markers of Altered Erythropoiesis for the Detection of Recombinant Human Erythropoietin Abuse in Athletes," *Haematologica*, 85:564–72. Caroline K. Hatton (2007), "Beyond Sports Doping Headlines: The Science of Laboratory Tests for Performance-Enhancing Drugs," *Pediatric Clinics of North America*, 54:713–33. Rafael Maia de Almeida Bento, Lucia Menezes Pinto Damasceno, and Francisco Radler de Aquino Neto (2003), "Recombinant Human Erythropoietin in Sports: A Review," *Revista Brasileira de Medicina do Esporte*, 9:181–90.

[analogues of analogues](#) Andreas Breidbach, Don H. Catlin, Gary A. Green, Inna Tregub, Henry Truong, and Jeffrey Gorzek (2003), "Detection of Recombinant Human Erythropoietin in Urine by Isoelectric Focusing," *Clinical Chemistry*, 49:901–7.

[new EPO replacement](#) Don H. Catlin, George A. Maylin, Sabrina Benchaar, Sandra M. Neades, Miranda S. Timmons, and Kenneth H. McKeever (2009), "Detection of Pegylated Epoetin in Horse Plasma after Intravenous Administration," *Comparative Exercise Physiology*, 6:105–8.

[first designer steroid](#) Henry K. Lee (4 Aug 2006), "Inventor of Clear Steroid Gets Three Months in Prison," *San Francisco Chronicle*.

[its fingerprint](#) Don H. Catlin, Brian D. Ahrens, and Yulia Kucherova (2002), "Detection of Norbolethone, an Anabolic Steroid Never Marketed, in Athletes' Urine," *Rapid Communications in Mass Spectrometry*, 16:1273–5.

[scenario was replayed](#) Don H. Catlin, Michael H. Sekera, Brian D. Ahrens, Borislav Starcevic, Yu-Chen Chang, and Caroline K. Hatton (2004), "Tetrahydrogestrinone: Discovery, Synthesis, and Detection in Urine," *Rapid*



*Communications in Mass Spectrometry*, 18:1245–9. Michael H. Sekera, Brian D. Ahrens, Yu-Chen Chang, Borislav Starcevic, Costas Georgakopoulos, and Don H. Catlin (2005), "Another Designer Steroid: Discovery, Synthesis, and Detection of Madol in Urine," *Rapid Communications in Mass Spectrometry*, 19:781–4.

[flow cytometry](#) Margaret Nelson, Michael Ashenden, Mark Langshaw, and Hazel Popp (2002), "Detection of Homologous Blood Transfusion by Flow Cytometry: A Deterrent against Blood Doping," *Haematologica*, 87:881.

Patricia A. Arndt and Belinda M. Kumpel (2008), "Blood Doping in Athletes: Detection of Allogeneic Blood Transfusions by Flow Cytometry," *American Journal of Hematology*, 83:657–67.

[gene doping](#) H. Lee Sweeney (Jul 2004), "Gene Doping," *Scientific American*, 291:63–9. Gary R. Gaffney and Robin Parisotto (2007), "Gene Doping: A Review of Performance-Enhancing Genetics," *Pediatric Clinics of North America*, 54:807–22.

[adulterated supplements](#) Jeff Jones (4 Dec 2002), "Tainted Supplements: Positive or Not?" *Cycling News*.

[Chinese herbal product](#) Patricia L. Eachus (1996), "Positive Drug Screen for Benzodiazepine Due to a Chinese Herbal Product," *Journal of Athletic Training*, 31:165–6.

[urine test for EPO](#) Monique Beullens, Joris R. Delanghe, and Mathieu Bollen (2006), "False-Positive Detection of Recombinant Human Erythropoietin in Urine Following Strenuous Physical Exercise," *Blood*, 107:4711–13. Joris R. Delanghe, Mathieu Bollen, and Monique Beullens (2007), "Testing for Recombinant Erythropoietin," *American Journal of Hematology*, 83:237–41.

[hotly contested](#) Don Catlin, Gary Green, Michael Sekera, Paul Scott, and Borislav Starcevic (2006), "False-Positive EPO Test Concerns Unfounded," *Blood*, 108:1778. Françoise Lasne (2006), "No Doubt About the Validity of the Urine Test for Detection of Recombinant Human Erythropoietin," *Blood*, 108:1778–9.

[Rapid-screen immunoassays](#) Nancy C. Brahm, Lynn L. Yeager, Mark D. Fox, Kevin C. Farmer, and Tony A. Palmer (2010), "Commonly Prescribed Medications and Potential False-Positive Urine Drug Screens," *American Journal of Health Systems & Pharmacy*, 67:1344–50.

[Vicks Vapor Inhaler](#) Telegraph (21 Mar 2002), "British Skier Stripped of Bronze."

[appearance of a website](#) Rachna Dhamija, J.D. Tygar, and Marti Hearst (2006), "Why Phishing Works," *CHI '06 Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*.

[least costly measures](#) Tom LaTourette, David R. Howell, David E. Mosher, and John MacDonald (2006), *Reducing Terrorism Risk at Shopping Centers: An Analysis of Potential Security Options*, RAND Technical Report.

## Chapter 11

[Robert A. Heinlein](#) Robert A. Heinlein (1988), *To Sail Beyond the Sunset*, G.P. Putnam's Sons, 38–9.

[levels of moral meaning](#) Kenneth R. Melchin (1998), *Living with Other People: An Introduction to the Christian Ethics Based on Bernard Lonergan*, The Liturgical Press, 56–60.

[good summary](#) William C. Crain (1985), "Kohlberg's Stages of Moral Development," Chapter 7 of *Theories of Development: Concepts and Applications*, Prentice-Hall, 118–36.

[Social identity theory](#) Henri Tajfel (1974), "Social Identity and Intergroup Behaviour," *Social Science Information*, 13:65–93. Naomi Ellemers, Russell Spears, and Bertjan Doosje (2001), "Self and Social Identity," *Annual Review of Psychology*, 53:161–86.

[immolated themselves](#) Michael Biggs (2005), "Dying Without Killing: Self-Immolations, 1963–2002," in Diego Gambetta, ed., *Making Sense of Suicide Missions*, Oxford University Press.

[Brian Christian](#) Brian Christian (2011), *The Most Human Human: What Talking with Computers Teaches Us About What it Means to Be Alive*, Doubleday.

[useful mechanism](#) Gordon Tullock (1967), "The Prisoner's Dilemma and Mutual Trust," *Ethics*, 77:229–30.

[Stop Snitching campaign](#) Rachael Woldoff and Karen G. Weiss (2010), "Stop Snitchin': Exploring Definitions of the Snitch and Implications for Urban Black Communities," *Journal of Criminal Justice & Popular Culture*, 17:184–223. Bret D. Asbury (2011), "Anti-Snitching Norms and Community Loyalty," *Oregon Law Review*, 89:1257–312.

[Nepotism is making](#) Helen Thomas (16 Aug 2001), "Bush Keeps It All in the Family," *Seattle Post-Intelligencer*.

[Senator Frank Murkowski](#) Jonathan Turley (13 Jan 2003), "Public Payroll: A Family Affair," *Los Angeles Times*.

[Representative Richard Pombo](#) League of Conservation Voters (2005), "Rep. Richard Pombo's Family & Friends Network."

[Representative Eddie Bernice Johnson](#) Todd J. Gillman and Christy Hoppe (28 Aug 2010), "Rep. Eddie Bernice Johnson Violated Rules, Steered Scholarships to Relatives," *Dallas Morning News*.

[Even Bernie Sanders](#) Vermont Guardian (21 Apr 2005), "Nepotism Crosses Party Lines," *Vermont Guardian*.

[one in six staffers](#) Christine MacDonald (6 May 2011), "Nepotism Rampant at Detroit Libraries: 1 in 6 Staffers Have Relatives Who Work in Strapped Department," *The Detroit News*.

[Rupert Murdoch's News Corp](#) Mark Sweney (17 Mar 2011), "Rupert Murdoch's News Corp Sued Over 'Nepotism' in Buying His Daughter's Firm: Investors Allege Group Is Overpaying in \$675m Deal to Acquire Elisabeth Murdoch's TV Production Business Shine," *The Guardian*.

[Many states have policies](#) New York State Bar Association Committee on Professional Ethics (1975), "Topic: Conflict of Interests; Lawyer Spouses as Assistant District Attorney and Assistant Public Defender," Opinion #409—8/28/75 (69–75). State Bar of Montana (1988), "May Spouses Serve as Opposing Counsel, Actively Engaging in the Same Suit or Matter on Opposite Sides?" Ethics Opinion 950407. Sandra Carlin Guin (1985), "Marital Status as a Reason for Attorney-Spouse Disqualification," *Journal of the Legal Profession*, 9:181–8.

## Chapter 12

[One.Tel in Australia](#) Elizabeth Sexton (27 Oct 2007), "Adler Settles In One.Tel Bonus Case," *Sydney Morning Herald*.

[Massey Energy](#) U.S. Department of Labor Mine Safety and Health Administration (29 Jun 2011), "Upper Big Branch Mine, Mine ID: 46-08436, April 5, 2010 Accident, Public Briefing." J. Davitt McAteer, Katie Beall, James A. Beck, Jr., Patrick C. McGinley, Celeste Monforton, Deborah C. Roberts, Beth Spence, and Suzanne Weise (2011), "Upper Big Branch: The April 5, 2010, Explosion: A Failure of Basic Coal Mine Safety Practices," Governor's Independent Investigation Panel.

[questionable telecom credits](#) Jonathan A. Knee (2006), *The Accidental Investment Banker: Inside the Decade that Transformed Wall Street*, Oxford University Press, xvii.

[described dot.coms In the matter of Merrill Lynch & Co.](#) (2002), Decision and Order, Supreme Court of the State of New York.

## Chapter 13

[band together into](#) Tim Wu (2010), *The Master Switch: The Rise and Fall of Information Empires*, Alfred A. Knopf.

[High barriers to entry](#) John M. Connor (2002), "The Food and Agricultural Global Cartels of the 1990s: Overview and Update," Purdue University Department of Agricultural Economics, Staff Paper 02-4.

[There are exceptions](#) Yvonne Chouinard (2005), *Let My People Go Surfing: The Education of a Reluctant Businessman*, Penguin Press.

[implant false memories](#) Priyali Rajagopal and Nicole Votolato Montgomery (2011), "I Imagine, I Experience, I Like: The False Experience Effect," *The Journal of Consumer Research*, 38:578–94.

[The economic term](#) Paul A. David (1985), "Clio and the Economics of QWERTY," *The American Economic Review*, 75:332–7. W. Brian Arthur (1989), "Competing Technologies, Increasing Returns, and Lock-In by Historical Events," *The Economic Journal*, 99:116–31. Stan J. Liebowitz and Stephen E. Margolis (1995), "Path Dependence, Lock-In, and History," *Journal of Law, Economics & Organization*, 11:205–26. Begoña Garcia Mariñoso (2001), "Technological Incompatibility, Endogenous Switching Costs and Lock-In," *The Journal of Industrial Economics*, 49:281–98. Gal Zauberman (2003), "The Intertemporal Dynamics of Consumer Lock-In," *Journal of Consumer Research*, 30:405–19. William Barnes, Myles Gartland, and Martin Stack (2004), "Old Habits Die Hard: Path Dependency and Behavioral Lock-In," *Journal of Economic Issues*, 38:371–7. Joseph Farrell and Paul Klemperer (2007), "Coordination and Lock-In: Competition with Switching Costs and Network Effects," in Mark Armstrong and Robert Porter, eds., *Handbook of Industrial Organization, Volume 3*, North-Holland, 1967–2072.

[able to bargain down](#) Tricia Bishop (13 Dec 2008), "Court Orders 'Scareware' Shut Down," *Baltimore Sun*. Lucian Constantin (16 Jun 2009), "ByteHosting Settles with the FTC in Scareware Advertising Lawsuit," *Softpedia*.

[hydraulic fracturing](#) U.S. House of Representatives Committee on Energy and Commerce Minority Staff (2011), "Chemicals Used in Hydraulic Fracturing."

[company's arguments](#) *New York Times* (3 Nov 2009), "The Halliburton Loophole (Editorial)," *New York Times*.

[The same dynamic](#) Frederick P. Brooks, Jr. (1975), *The Mythical Man-Month*, Addison-Wesley.

[Senator Bernie Sanders](#) Bernard Sanders (6 Nov 2009), "Too Big To Fail—Too Big To Exist," *Huffington Post*.

## Chapter 14

[ineffective tactic](#) Max Abrams (2006), "Why Terrorism Does Not Work," *International Security*, 31:42–78. Bruce Schneier (12 Jul 2007), "The Evolutionary Brain Glitch that Makes Terrorism Fail," *Wired News*.

[isn't just theoretical](#) A. Peter McGraw, Alexander Todorov, and Howard Kunreuther (2011), "A Policy Makers Dilemma: Preventing Terrorism or Preventing Blame," *Organizational Behavior & Human Decision Processes*, 115:25–34.

## Chapter 15

[studied systems dynamics](#) Daniel H. Kim and Virginia Anderson (1989), *Systems Archetype Basics*, Pegasus Communications. Peter Senge (1990), *The Fifth Discipline: The Art and Practice of the Learning Organization*, Currency.

[experiential goods](#) Daniel Gilbert (2006), *Stumbling on Happiness*, Knopf.

[Ben Franklin said](#) Richard Jackson (1759), *An Historical Review of the Constitution and Government of Pennsylvania*.

[also human nature](#) Joyce Ehrlinger and Richard P. Eibach (2011), "Focalism and the Failure to Foresee Unintended Consequences," *Basic & Applied Social Psychology*, 33:1, 59–68.

[major political backlash](#) Sophie Goodchild (27 Aug 2006), "500,000 Wheelie Bins 'Have a Spy In the Lid,'" *The Independent*. Louise Gray (21 Jul 2009), "Councils 'Snooping' In Bins To See Who Is Recycling Properly," *The Telegraph*. Chris Gourlay and Maurice Chittenden (11 Oct 2009), "Bin Police Make You Save Every Scrap," *London Times*. Philip Reynolds (30 Apr 2010), "Bin Sensor Technology Revolutionizes Waste Collection,"

*Materials Recycling Week*. British Broadcasting Corporation (5 Mar 2011), "Warning of Rise in Microchips in Council Bins," *BBC News*.

[life-cycle management](#) U.S. Environmental Protection Agency (2010), "Recycling and Reuse: End-of-Life Vehicles and Producer Responsibility."

[The Innocence Project](#) Innocence Project (2011), "Facts on Post-Conviction DNA Evidence."

[Cheating on test scores](#) Heather Vogell (6 Jul 2011), "Investigation Into APS Cheating Finds Unethical Behavior Across Every Level," *Atlanta Journal-Constitution*. Jaime Sarrio (10 Jul 2011), "Cheating Scandal Adds Fuel to Debate Over High-Stakes Tests," *Atlanta Journal-Constitution*. Michael Winerip (31 Jul 2011), "Pa. Joins States Facing a School Cheating Scandal," *New York Times*.

[One teacher described](#) Benjamin Herold (28 Jul 2011), "Confession of a Cheating Teacher," *The Notebook*.

[Scott Adams wrote](#) Scott Adams (1996), *The Dilbert Principle: A Cubicle's-Eye View of Bosses, Meetings, Management Fads & Other Workplace Afflictions*, HarperBusiness, 12.

[18 years if](#) Matthew Sherman (2009), "A Short History of Financial Deregulation in the United States," Center for Economic and Policy Research.

[potential failure](#) Alexis de Tocqueville (1835), *Democracy in America*, Saunders and Otley.

## Chapter 16

[the singularity](#) Vernor Vinge (1993), "Technological Singularity," paper presented at the VISION-21 Symposium sponsored by NASA Lewis Research Center and the Ohio Aerospace Institute, 30–31 March. Raymond Kurzweil (2005), *The Singularity is Near: When Humans Transcend Biology*, Penguin Press.

[against the government](#) Leonard Deutchman and Sean Morgan (2005), "The ECPA, ISPs and Obtaining E-mail: A Primer for Local Prosecutors," American Prosecutors Research Institute. U.S. Department of Justice, Computer Crime & Intellectual Property Section (2009), *Searching and Seizing Computers and Obtaining Electronic Evidence in Criminal Investigations*, Third Edition, Office of Legal Education Executive Office for United States Attorneys.

[Clay Shirky writes](#) Clay Shirky (2008), *Here Comes Everybody: The Power of Organizing Without Organizations*, Penguin Press.

[terms of service](#) *Wall Street Journal* (4 May 2011), "Terms of Use for SafeHouse," *Wall Street Journal*.

[Lord Kelvin said](#) Silvanus Phillips Thompson (2011), *The Life of William Thomson, Baron Kelvin of Largs*, Cambridge University Press.

## Chapter 17

[leap of faith](#) Søren Kierkegaard (1844), *The Concept of Anxiety*. Alistair Hannay and Gordon Marino, eds. (1997), *The Cambridge Companion to Kierkegaard*, Cambridge University Press.

[World Values Survey](#) Jaime Diez Medrano (2011), "Interpersonal Trust," World Values Survey Archive and ASEP/JDS.

[results differ widely](#) Magali Rheault (5 Oct 2007), "Many World Citizens Trust Neighbors More Than Police: Trust in Neighbors and Police About Equal in 21 Countries," Gallup.

[tried something similar](#) *Reader's Digest* (Jul 2007), "The Reader's Digest Global Phone Test."

[laboratory experiment](#) Simon Gächter, Benedikt Herrmann, and Christian Thöni (2010), "Culture and Cooperation," CESifo Working Paper No. 3070.

[attributed to King](#) Jamie Stiehm (3 Sep 2010), "Oval Office Rug Gets History Wrong," *Washington Post*.