Freakonomics

INTRODUCTION

HISTORICAL CONTEXT

Freakonomics alludes to many historical events, including the Reconstruction period following the end of the Civil War in 1865. Following the Civil War, the federal troops of the United States occupied the Southern states until 1876. During this time, opponents of military intervention and racial equality founded the Ku Klux Klan. Over time, the Klan expanded to become a huge, reactionary group that intimidated, and in some cases murdered, blacks, Jews, Catholics, and Communists. Another significant historical event mentioned in the book is the crack epidemic of the 1980s. During this period, crack cocaine became one of the most commonly consumed drugs in the United States; in the authors' opinions, the prevalence of crack in black neighborhoods led to a widening achievement gap between blacks and whites in the United States.

RELATED LITERARY WORKS

Freakonomics bears some striking similarities to another work of "pop sociology' written in the 2000s: Malcolm Gladwell's *The Tipping Point* (2000). Like *Freakonomics*, Gladwell's book uses the social sciences to study seemingly random phenomena. And like *Freakonomics*, Gladwell's book spends a lot of time studying the decreasing crime rate of the 1990s, and the role of nature and nurture in child development. Additionally, *Freakonomics* has been compared to various other works of popular social science published between the 90s and the 2010s. Books in a similar vein include *The Black Swan* by Nassim Nicholas Taleb (2007), and *The Better Angels of Our Nature* by Steven Pinker (2011).

KEY FACTS

- **Full Title:** Freakonomics: A Rogue Economist Explores the Hidden Side of Everything
- **When Written:** 2003-2005
- **Where Written:** New York, Boston, and Chicago
- **When Published:** April 12, 2005
- **Literary Period:** "Pop sociology"
- **Genre:** Economics, sociology, non-fiction
- **Point of View:** Third person, with frequent third person-plural asides

EXTRA CREDIT

The Freakonomics empire. Only a few books ever become popular enough to be adapted as films. In 2010, *Freakonomics* was adapted as a documentary feature, with short segments directed by different documentary filmmakers. But that's not all—since 2005, Dubner and Levitt have founded a podcast, a blog, and a philanthropic consulting group based on their book.

...and it's even on Netflix. One of the most amusing shout-outs to *Freakonomics* occurred in Season Three of the Netflix show *Orange is the New Black*. In the first episode of the season, one of the characters alludes to the book's argument about the relationship between abortions and the lowering crime rate.

PLOT SUMMARY

The book takes the form of six chapters. In each chapter, the authors analyze a different social issue from an economic perspective.

The first (and longest) chapter focuses on the role of incentives in human behavior. The authors argue that humans usually make decisions based on the incentives for their actions. These incentives fall into three general categories: economic incentives, moral incentives (i.e., doing the "right thing"), and social incentives (i.e., being praised or criticized by one's peers).

One of the best ways to understand how incentives work is to analyze cheating in different walks of life. In the Chicago Public School system, there are annual standardized tests. The results of these tests—which all public school students must take—dictate whether or not the students' teachers get raises and promotions, and whether or not the students will be accepted into certain classes. There is an obvious economic incentive for teachers to cheat on the results of standardized tests, and in certain years, about five percent of teachers did cheat. Another case of cheating is sumo wrestling. In 15-round sumo tournaments, one's overall standing in the wrestling world is dependent on getting a positive record (i..e, winning at least 8 matches). Studies have found that an unusually high number of sumo wrestlers with a 7-7 record will defeat opponents with an 8-6 record. This is probably because the 8-6 wrestler has been bribed to throw the round, ensuring that both wrestlers end the tournament with a positive record. A final instance of cheating is the career of a man named Paul Feldman. Feldman has made a comfortable living by traveling to different businesses and bringing them bagels. Feldman asks company employees to leave a dollar for every bagel they eat. Surprisingly, Feldman rarely has major problems with such an "honor system"—almost everyone pays for their bagels instead of stealing them.

In the second chapter, the authors look at the history of the Ku

Klux Klan. For more than a hundred years, the Ku Klux Klan was a powerful opponent of racial equality in the American South. The Klan is also a classic example of information asymmetry: i.e., the situation in which one person or group has more information than another person or group. The Klansmen controlled lots of private information: they had lots of passwords and secret handshakes, for instance. In much the same way, real estate agents have a secret language of "code words," which they can use to communicate with one another. Real estate agents, one might think, have an incentive to sell clients' houses for as much money as possible. But in reality, real estate agents' main incentive is to sell more houses, *quickly*—therefore, they'll sometimes intentionally sell a house for a cheaper price to "speed things along." There are many other examples of asymmetric information: for example, most people will fudge the details about themselves when they're on a date or in a job interview.

In the third chapter, the authors examine the history of the crack epidemic in the United States. Economically speaking, drug gangs selling crack aren't all that different from a McDonald's franchise. The crack business, just like any other competitive business in America, is attractive to people because of its potential rewards. In Chicago, researchers met a drug dealer named J.T., who made more than 100,000 dollars per year as the head of his "franchise" of the Black Disciples, a crack-selling gang. J.T. employed dozens of "foot soldiers," who were responsible for selling crack on Chicago's South Side. Even though foot soldiers had a one in four chance of being murdered, they continued to work for J.T., and when they were killed, J.T. had no trouble finding eager replacements. Not unlike aspiring actors moving to Hollywood, foot soldiers were willing to risk their lives in the hopes that they could "climb the ladder" and become rich and powerful. The chapter also details some of the history of the crack epidemic in the United States. In the 1970s, cocaine became a highly popular drug in the U.S. Because most people couldn't afford real cocaine, they turned to a cheaper alternative, crack cocaine. Crack became so widespread that gangs made small fortunes by selling it. However, the bulk of this money went to a small number of leaders of drug gangs—the foot soldiers assumed almost all of the risk, in return for exceptionally small cuts of the profits.

The discussion of American crime continues in the fourth chapter, which is about the remarkable decline in crime in the 1990s. In this chapter, the authors discuss eight hypotheses for why crime rates went down so dramatically in the mid-90s. Popular theories for the decline include new policing strategies, capital punishment, and new gun-control laws. But the authors refute these explanations, showing how they don't line up with the data. The primary causes of the declining crime rates include increased incarceration rates, a growing number of police officers, and—perhaps most important of all—the influence of abortions. Following the 1973 Supreme Court case, *Roe v. Wade*, abortions became legal in the United States. As a result, after 1973, many women in impoverished communities had abortions where they would otherwise have had unwanted children. Since unwanted children have an unusually high probability of growing up to become criminals, *Roe v. Wade* may have drastically decreased the number of children who grow up to commit crimes—an effect that didn't become clear until the mid-90s, as the post-*Roe v. Wade* generation entered its twenties.

The fifth chapter examines the influence of parents on their children, and tries to understand whether nature or nurture is more important to a child's development. Various studies suggest that at least half of a parent's influence on a child is genetic in nature. There have even been studies of school systems that suggest that the high school a student attends makes little difference to that student's academic success—a statement that would shock many educators. The authors analyze 16 different factors that are hypothesized to play a role in a child's development. Overall, the authors find that parenting methods that entail specific actions (such as taking one's child to museums, spanking the child, reading to the child every night, etc.) play little to no role in the child's development, whereas there are many parental *qualities* (such as the parents' level of education, their age at the time of having children, etc.) that have a demonstrable influence on a child's development. Such data might suggest that genetics plays a larger role in a child's development than parental nurture does.

In the sixth chapter, the authors study the influence of a child's name on his or her development. It's clear that names can prejudice people in measurable ways. For instance, one study showed that a hypothetical candidate named "DeShawn Williams"—a stereotypically black name—was considerably less likely to get job interviews than another hypothetical candidate named "Jake Williams," even when both candidates had exactly the same resume. Statistical analyses of naming trends suggest some surprising results. First, in the last 30 years it's become increasingly common for people in the black community to give their names distinctively black names—in other words, names not likely be found outside the black community. This trend reverses the trend found in the black community before the 1980s, perhaps suggesting increased racial solidarity and black pride. Another significant trend is that common names tend to "trickle" down from the upper classes to the working classes. Many names that were popular among upper-class families 40 years ago have now become most popular in working-class families. One can even predict, with a fair degree of accuracy, what baby names will be most common in 20 years by studying which baby names are currently the most popular among upper-class families.

In the epilogue, the authors make the important point that statistical analyses of "child development," "economic success," and other material measures are often insufficient for

understanding how people really behave. To illustrate this, they look at two children—the first child grew up in an impoverished black community and had an abusive father; the second child grew up in an upper-class white community and had loving parents. On paper—that is, economically speaking—the second child appeared to be headed for greater "life success" than the first child. But the first child, Roland Fryer, grew up to be a brilliant Harvard economist and, by anyone's reckoning, a highly "successful" man. The second child, Ted Kaczynski, grew up to be the Unabomber.

CHARACTERS

Norma McGorvey – Lead plaintiff in *Roe v. Wade*, the landmark 1973 Supreme Court case that legalized abortion in the United States.

Arne Duncan – The CEO of the Chicago Public School system in the early 2000s, notable for his attempts to crack down on cheating on federal tests.

Paul Feldman – Former government researcher who founded his own bagel-delivery company.

Adam Smith – 18th century Scottish economist whose works *The Wealth of Nations* and *The Theory of Moral Sentiments* are still widely studied.

Plato – Ancient Greek philosopher, whose Platonic Dialogues are often regarded as cornerstones of Western thought.

Stetson Kennedy – Southerner who, during the 1940s, launched a highly effective initiative to reduce the influence of the Ku Klux Klan.

K. – A close friend of the authors, who learned some sobering realities about the real estate business.

Rudolph Giuliani – Mayor of New York City during the mid to late 1990s, whose policing methods, using the "broken window theory" of criminology, are sometimes credited with "cleaning up" the city.

David Dinkins – Mayor of New York City in the early 1990s, and a frequent political opponent of Rudolph Giuliani.

John Kenneth Galbraith – Influential 20th century economist whose works, including *The Affluent Society* (1958), are credited with popularizing ideas and terms such as "conventional wisdom."

Sudhir Venkatesh – Economic researcher who conducted a monumental study of the crack cocaine epidemic in Chicago.

J.T. – Drug dealer and leader of a drug gang in Chicago—the subject of Sudhir Venkatesh's academic research.

Booty – A member of J.T.'s gang, who supplies Sudhir Venkatesh with detailed records of the gang's economic transactions.

Nicolae Ceaușescu – Communist dictator of Romania until 1989.

John Lott – Influential proponent of "right-to-carry" gun laws.

Robert Lane – Father of Winner Lane and Loser Lane.

Winner Lane – Son of Robert Lane, and, despite his name, a repeat offender who spent much of his life in jail.

Loser Lane – Son of Robert Lane and, in spite of his name, a successful detective for the NYPD.

Roland Fryer – Harvard economist who overcame his impoverished, abusive childhood to become a successful professor and writer, cited many times in the book.

David Duke – Notorious white supremacist and former Imperial Wizard of the Ku Klux Klan.

Ted Kaczynski – American terrorist and anarchist who, in spite of his privileged childhood and tremendous academic success, became the Unabomber, one of the deadliest terrorists in American history.

THEMES

In LitCharts literature guides, each theme gets its own color-coded icon. These icons make it easy to track where the themes occur most prominently throughout the work. If you don't have a color printer, you can still use the icons to track themes in black and white.

INCENTIVES

At the core of *Freakonomics* is the concept of incentives. The concept of incentives is a way of explaining why human beings do things. In general, humans behave a certain way because they either perceive that behavior as offering a reward of some kind—a positive incentive, or "carrot"—or they avoid certain behaviors because those behaviors seem to lead to a punishment—a negative incentive, or "stick." Intuitively, we all understand how incentives work: people work harder at their jobs if they're offered the incentive of a higher salary; people may avoid eating certain foods if the foods offer a strong negative incentive of unhealthiness. Even so, Levitt and Dubner's model of incentives can often be somewhat counterintuitive, and paints a uniquely balanced picture of human behavior.

Levitt and Dubner list three general categories for incentives (each of which could be positive or negative, in the manner described above). First, and perhaps most obviously, there are economic incentives; material incentives, often in the form of money or property. For example, if the government passes a law fining people for walking on the grass, then the negative economic incentive of the fine will deter people from walking on the grass. There are also social incentives; incentives based

on human beings' desire to be accepted and liked by other people. People are more likely to cheat on exams and shoplift when they're alone, because if they were with their friends, they'd face the negative social incentive of being judged and scolded. Finally, there are moral incentives, based on people's desire to "do the right thing." In part, the reason that more people don't kill and steal is the positive moral incentive of being "good" and feeling good about one's behavior. This model of morality can be challenging, though, because in many religions and moral traditions, good behavior and self-interest are mutually exclusive. Economists, on the other hand, argue that people behave morally because they're getting some "thing" in return for their behavior: the satisfaction of having done right. *Freakonomics* shows how the three incentives can be used to explain almost any kind of human behavior. If there is any measurable change in human behavior—a crime wave, a decrease in abortions, a spike in movie ticket sales, etc.—this change *must* be the result of a change in one of the three incentives.

Freakonomics does not address the question of which one of the three incentives plays the biggest role in influencing behavior, suggesting that Levitt and Dubner take a balanced view of human nature. In many of the book's case studies, economic incentives seem to play the most important role: humans will choose whatever option yields the greatest material benefits. However, there are also many cases in which humans will ignore economic motives in order to impress other people or follow their own consciences. So in different cases, humans will behave selfishly, morally, or socially, or some combination of these. Ultimately, *Freakonomics* (and economics) defines human beings according to the things they desire and fear—material, social, and moral rewards and punishments. Human nature, one could argue, is a combination of these three competing desires, no single one of which is the most powerful in every case.

There are some obvious problems with the incentive model of human behavior, many of which are discussed in the following four themes. Incentives can be a reductive, overly simplistic way of talking about human nature, and many thinkers would argue that the three categories of incentives Levitt and Dubner propose overlap to a significant degree. Furthermore, while incentives can explain how a large group of people will behave, they can't always describe what individual human beings will do (as the authors acknowledge in the Epilogue). Incentives can be very useful for studying and interpreting human behavior, but it's important to recognize their limitations—and thus the limitations of economics itself.

IRRATIONAL BEHAVIOR, EXPERTS, AND "CONVENTIONAL WISDOM"

At times, human beings behave rationally. They pursue their own best interests, protecting their health, their financial security, and their safety. However, there are many times when human beings act irrationally, harming their own interests. In *Freakonomics*, Dubner and Levitt show how extensively irrational thinking governs our lives, and how economic knowledge can sometimes correct irrational thinking at its worst.

Dubner and Levitt detail two main forms of irrational behavior. First, *Freakonomics* shows how people allow fear to influence their behavior. At times, fear can be a highly rational behavior: after all, people are generally frightened of things that threaten their lives and oppose their own self-interest. However, humans aren't very good at estimating *relative* danger. For example, people tend to worry about dying in plane crashes far more than they worry about dying in car crashes, even though car crashes are far more common and equally lethal. Second, *Freakonomics* shows that people irrationally allow other people, especially groups of people, to influence their behavior. If a group of people behaves a certain way or believes in certain ideas, other people will tend to imitate the group's behavior and beliefs. In this way, misinformation can become so widespread that it becomes difficult to see the truth. John Kenneth Galbraith, the famous 20th century economist, referred to group misinformation as "conventional wisdom." Galbraith argued that the only way to see the truth about life was to ignore conventional wisdom and use economics. *Freakonomics* is dedicated to fighting the conventional wisdom, just as Galbraith wanted.

Largely as a result of fear and conventional wisdom, people have a tendency to place a lot of trust in so-called experts. In simplest terms, an expert is anyone who claims special access to information—real estate agents, science professors, and consultants are all different kinds of experts (with information about houses, science, and business, respectively). One common problem with experts, however, is that they can abuse their authority, manipulating the public's irrational fear and trust for conventional wisdom, furthering their own interests in the process. In part, *Freakonomics* is designed to encourage readers to question experts' authority and explore information on their own, using tools like the Internet and economic analysis that eliminate the need for an intellectual "middleman." In doing so, people can minimize the role of fear and conventional wisdom in their decision-making, and perhaps learn to make better decisions overall. (Dubner and Levitt, perhaps because they're writing in 2005, when the Internet was very different from what it is now, don't address the possibility that the Internet will also trigger the emergence of even more pundits, gurus, and other middlemen "experts" online—a possibility that seems to have come true in the decade since *Freakonomics* was published.)

It's important to recognize that not all forms of irrationality are necessarily bad. For instance, a family that chooses to feed a starving child would not, at least economically speaking, be behaving "rationally," but it would be hard to argue that feeding

the child isn't the right thing to do. Nevertheless, *Freakonomics* suggests that, for the most part, irrational behavior is harmful, both to oneself and to other people. Furthermore, Levitt and Dubner criticize the irrational behaviors that stem from experts abusing information (e.g., real estate agents lying to their clients), rather than the irrational behavior that stems from strong moral convictions (e.g., feeding the hungry child). To the extent that *Freakonomics* supports any course of action, it encourages people to use research and open-mindedness when making decisions, rather than blindly submitting to the authority of conventional wisdom, or to experts to know how to manipulate conventional wisdom.

MORALITY AND PRESCRIPTIVE VS. DESCRIPTIVE THINKING

Freakonomics can be a challenging book because of the way that it entertains controversial ideas. When the book was first published in 2005, some readers and reviewers criticized Levitt and Dubner for discussing the possibility that there is an inverse relationship between gun sales and gun violence—an idea that people might find offensive. Others faulted the authors for claiming that the heightening abortion rate of the 1970s and 80s caused the falling crime rates of the 1990s. In the Epilogue to *Freakonomics*, Levitt and Dubner acknowledge that some of their ideas might seem controversial, politically incorrect, or even immoral. However, they insist that economics and morality describe two different worlds: economics describes the world as it is, while morality describes the world as it should be. Understanding this difference is crucial to understanding *Freakonomics*.

In order to reach unbiased, scientific results, Levitt and Dubner try to limit their own political and moral preconceptions about the world. At times, they consider ideas that would strike some people as offensive, politically radical, or otherwise different from the "conventional wisdom" (see Theme Two). For instance, when considering the idea that people's racist preconceptions influence the results of job interviews, the authors consider the possibility that an applicant named "DeShawn Williams" would be less likely to get a job interview than another applicant named "Jake Williams," since "DeShawn" is a stereotypically black name. Even after the authors find that, indeed, an applicant named DeShawn *would* be less likely to get a job interview, they don't simply assume that this is because of employers' racism. Ultimately, the authors don't accept the conclusion that racism prevents black job applicants from attaining success—a conclusion that conventional wisdom might support—because of insufficient data to support such a conclusion. In general, then, *Freakonomics* is based on the premise that the best way to study the world "as it is" is to analyze data mathematically, even if mathematical data doesn't always agree with most people's beliefs.

Because of their commitment to data analysis, Levitt and Dubner are more comfortable with descriptive than prescriptive thinking. Descriptive analysis is concerned with describing the world as it is (i.e., analyzing and explaining where existing data comes from), whereas prescriptive analysis is concerned with recommending what *should* be done. In analyzing the crime rate, for example, the authors conclude that the best explanation to describe the data for crime in the United States is that rising abortion rates in the 1970s reduced the number of children who would grow up to commit crimes. Some people found this idea outrageous because they interpreted it to mean that abortions *should* be used to fight crime (a prescriptive idea). In reality, though, Levitt and Dubner were merely suggesting that abortion *was* an important influence on the falling crime rates of the 1990s: one of the many descriptive points they make in their book.

In order to be a good economist, Levitt and Dubner argue, one must entertain possibilities that conflict with one's morality, politics, and religion; *Freakonomics* tries to train its readers to think in this impartial manner. For example, after their analysis of abortion and the crime rate, Levitt and Dubner offer a long discussion of the relative morality of abortion and murder, in which they hypothesize that human fetuses might be "worth" one one-hundredth of an infant's life. The passage seems shocking (and even deliberately provocative) in the way it uses numbers to talk about the relative value of human lives. And yet such discussions, off-putting though they might be, are important to the study of human behavior. By using surprising and somewhat provocative examples, the authors arguably encourage readers to think outside the box, rousing people from the "slumber" of politeness and conventional wisdom.

NATURE VS. NURTURE

Much of *Freakonomics* is concerned with the difference between nature—the genetic qualities with which a human being is born—and nurture—the environmental influences that shape a human being's character and behavior. By studying the relative influence of nature and nurture in children, the book reaches some interesting conclusions about both, while also suggesting some of the strengths and weaknesses of economics itself.

In order to assess the relative importance of nature and nurture, Levitt and Dubner use statistical methods to imitate the format of a scientific experiment. Using data gathered by the Department of Education, among many other institutions, the authors apply "regression" analysis in order to understand the relationship between many different variables. With the data gathered by the Department of Education, for example, it's possible to find subjects that are statistically identical, save for a few variables (for example, IQ, parents' income level, etc.). By isolating these few variables, economists can mathematically test the strength of the correlation between

the variables; in other words, they can determine if there is a positive or a negative relationship between the variables, or if the variables have no influence on one another. This process imitates the format of a science experiment by isolating specific variables, and studying how changes in one variable (the independent variable) correlate with changes in another variable (the dependent variable).

The results of Levitt and Dubner's regression analysis suggest that nature and nurture both play some role in a human being's growth and behavior. There are many situations in which the parents' income and education level tend to "trickle down" to the child, regardless of the child's genetics. For instance, when identical twins (i.e., children whose "nature" is identical) are adopted by different parents, the twin who's adopted by the wealthier, more educated parents is more likely to go to college and get a higher-paying job. However, in the majority of the cases Levitt and Dubner analyze, nature seems to play the stronger role in determining a child's academic success, future income level, health, happiness, and general development. Statistical analyses suggest that parenting *methods*, such as reading to one's child, going to museums with the child, and spanking the child, have little to no correlation with the child's development. On the other hand, parental *qualities* like education, age, and general optimism correlate strongly with a child's development. This would seem to suggest that parents pass on their useful qualities to their children genetically (i.e., through nature).

The manner in which Levitt and Dubner reach their conclusions about nature's superiority to nurture suggests some of the conceptual weaknesses of economics, however. Levitt and Dubner have no way of studying how, exactly, genetics influences human development; only biologists and geneticists can provide those details. Indeed, the only way that Levitt and Dubner can determine that genetics plays a greater role in human behavior than nurture is by process of elimination: i.e., the fact that parental behaviors don't play as large a role in child development would seem to indicate that genetics *do*, without explaining exactly how. Furthermore, Levitt and Dubner are forced to admit that statistical analysis cannot predict how people are going to behave in the future; in other words, there is always an element of randomness that no analysis of nature *or* nurture can account for. For instance, a child with a good education and loving, wealthy, educated parents could still turn out to be a serious criminal for reasons that no statistical analysis could reveal (and in fact, one such child, Ted Kaczynski, grew up to be the Unabomber, a notorious terrorist). So even if economics can use mathematics to suggest that nature plays a greater role in human behavior than nurture does, the limits of economics itself might—by Levitt and Dubner's own admission—cause us to take this hypothesis with a grain of salt. To understand human behavior, we need economics—but we also need genetics, anthropology, history, and many other areas of study.

CRIME

More than half of the chapters of *Freakonomics* take some form of crime as their subject. Throughout the book, the authors use case studies of crime as examples of important economic principles. But crime is more than just an illustration of economic ideas—it's an important theme of *Freakonomics* in its own right. In general, the authors' impartial, behavioral arguments have the effect of removing the stigma of crime and humanizing criminals.

One of the authors' most important points about crime is that crime can be a rational behavior. For people who live in impoverished neighborhoods with few job opportunities, crime can be the best way to lead a productive, happy life. Thus, people often turn to crime because of their ambition, intelligence, and optimism, not because of their innate "badness," as conventional wisdom would have it. Indeed, close analysis of criminal practices like the drug trade reveals the sale of crack cocaine to be structurally identical to the sale of McDonald's hamburgers. As the authors show, criminals "manage" drug gangs in the same way that managers run fast food franchises. The shallow stereotype that criminals are innately bad people neglects an important economic truth: people respond to incentives. Often, criminals are simply responding to economic incentives to steal, sell drugs, etc., just as other people respond to economic incentives to pay taxes, go to work, etc.

Even when crime *isn't* an entirely rational behavior, it still has a lot in common with ordinary, law-abiding behavior. Crime is dangerous, and many criminals lose their lives while breaking the law—a fact which leads many people to conclude that criminals must be somehow inhuman or suicidal. But, as economic analysis can verify, criminals risking their lives to sell drugs aren't very different from aspiring actors moving to Hollywood, or dedicated weight lifters who wake up at dawn to train. In all three cases, humans have the capacity to sacrifice their own happiness and safety for the sake of their ambitions (becoming a powerful drug kingpin, a movie star, or Mr. Universe, respectively).

In general, the scientific methods and impartial tone of *Freakonomics* suggest an important conclusion about crime: crime isn't inherently evil; on the contrary, it's often a normal human response to a harsh economic situation.

SYMBOLS

Symbols appear in **teal text** throughout the Summary and Analysis sections of this LitChart.

THE WHITE CHILD AND THE BLACK CHILD

At several points in the book, Dubner and Levitt bring up a "hypothetical" situation concerning two children, one white, the other black. The white child is raised in a nice part of Chicago, has two loving parents, and does well in school. The black child grows up in an impoverished part of Florida, has an abusive father, and faces lots of adversity. However, the two children defy all expectations: the white child grows up to be a terrorist, while the black child grows up to be a Harvard economist. At this point, it's revealed that the two children aren't hypothetical at all: the white child is Ted Kaczynski (the Unabomber), and the black child is Roland Fryer (an economist, cited several times in the book). Ultimately, the white child / black child scenario symbolizes the inability of economic models to predict human behavior with complete accuracy. No matter how many factors economists study (income, parenting, education) in the context of a large group of people, it's still a mystery how individual humans will respond to this set of influences.

QUOTES

Note: all page numbers for the quotes below refer to the Harper Perennial edition of *Freakonomics* published in 2009.

Introduction Quotes

And the millions of women most likely to have an abortion in the wake of *Roe v. Wade*—poor, unmarried, and teenage mothers for whom illegal abortions had been too expensive or too hard to get—were often models of adversity. They were the very women whose children, if born, would have been much more likely than average to become criminals. But because of *Roe v. Wade*, these children weren't being born. This powerful cause would have a drastic, distant effect: years later, just as these unborn children would have entered their criminal primes, the rate of crime began to plummet.

Related Themes:

Page Number: 4

Explanation and Analysis

In the introduction to the book, Levitt and Dubner discuss the declining crime rate in the United States during the 1990s. Although hundreds of explanations have been proposed for why crime went down so greatly in those years, few people have considered the possibility that Levitt and Dubner discuss here: the crime rate went down because of the Supreme Court ruling in *Roe v. Wade*, the 1973 decision that legalized abortions in America. Because abortions were now legal, millions of working-class mothers who would have otherwise been forced to raise unwanted children aborted their unborn children. Furthermore, studies show that children with negligent parents are significantly more likely to commit crimes as adults. Therefore, it follows that *Roe v. Wade* decreased the number of children that fit such a description, decreasing the crime rate in the process.

The authors' conclusions might seem surprising, callous, or even barbaric. But Levitt and Dubner are simply doing their jobs as economists—analyzing the data (crime statistics, as they correlate with abortions) and suggesting conclusions based on the data. Levitt and Dubner aren't saying that abortions *should* be used to fight crime; rather they're just interpreting the data as it stands. The distinction between interpreting data and advocating a specific plan of action is very important to understanding *Freakonomics*, and defends the authors from unfair accusations of immorality and callousness.

Consider the folktale of the czar who learned that the most disease-ridden province in his empire was also the province with the most doctors. His solution? He promptly ordered all the doctors shot dead.

Related Themes:

Page Number: 9

Explanation and Analysis

This passage establishes the difference between causation and correlation. When two variables are correlated, it just means that there appears to be *some* relationship between the variables—what that relationship consists of isn't clear. When there's causation between two variables, it means that one variable causes another. Interpreting correlation as causation can be disastrous, as in this old fable about the czar who executes his doctors for "causing" disease (when in reality, doctors' presences were merely *correlated* with the prevalence of disease).

The difference between causation and correlation is important because it establishes the interpretive role of the economist. Economists can use mathematical analysis to show a correlation between different data points. But mathematics isn't always enough to prove causation. Often, it's the job of the economist to assess different kinds of

correlation, and argue which kinds are indicative of causation. (In the chapter on child rearing, for example, the authors will analyze 16 different variables' correlation with child development, and offer their own interpretations of which variables show correlation and which show causation).

Chapter 1 Quotes

❝ We all learn to respond to incentives, negative and positive, from the outset of life. If you toddle over to the hot stove and touch it, you burn a finger. But if you bring home straight As from school, you get a new bike. If you are spotted picking your nose in class, you get ridiculed. But if you make the basketball team, you move up the social ladder. If you break curfew, you get grounded. But if you ace your SATs, you get to go to a good college. If you flunk out of law school, you have to go to work at your fathers insurance company.

Related Themes:

Page Number: 16

Explanation and Analysis

This passage establishes the theory of incentives—a concept at the core of *Freakonomics*. The "incentives model" of human behavior suggests that humans do things for only two basic reasons: to achieve a positive incentive or avoid a negative incentive. As the examples in this passage suggest, incentives can be used to explain a startling range of human behaviors.

The concept of incentives can be used to explain many different forms of behavior, but it's not a perfect theory. Critics of incentives argue that incentives paint an amoral, overly logical picture of human nature. Critics also argue that the theory of incentives doesn't address some important points—for example, how conscious human beings are of their responses to incentives (as the examples above would suggest, humans can respond to incentives in a rational, logical manner, or an instinctive manner—in effect, humans can choose to respond to some incentives, but not others). Incentives are most effective when they're used to study large groups of people, not individuals. A single human being may or may not respond to strong economic incentives, but on average, a large group of people will.

❝ Is it possible, then, that an 8-6 wrestler might allow a 7-7 wrestler to beat him? A sumo bout is a concentrated flurry of force and speed and leverage, often lasting only a few seconds. It wouldn't be very hard to let yourself be tossed.

Related Themes:

Page Number: 39

Explanation and Analysis

In this part of Chapter 1, the authors apply the theory of incentives to an unlikely walk of life: sumo wrestling. Levitt and Dubner try to test a hypothesis—that sumo wrestlers will respond to strong economic incentives, even if doing so requires them to occasionally throw a match. In order to test their hypothesis, the authors study matches between two different kinds of wrestlers: wrestlers who have a 7-7 record going into the 15th and final round of a tournament, and wrestlers who have an 8-6 record (and have little economic incentive to win the match, since they already have a positive record, and will move on to the next round).

The passage is a good example of how economists can use the theory of incentives, coupled with rigorous scientific methods, to study human behavior. As the passage suggests, it is almost impossible to prove to a certainty that *specific* sumo matches are rigged (since it's so easy to cheat convincingly). Therefore, the only way to study cheating is to look at the large group of sumo wrestlers and study their overall behavior. In effect, the authors are conducting an experiment, analyzing the overall behavior of a large group of sumo wrestlers, and controlling for factors like talent, motivation, and economic incentive. Ultimately, the authors conclude that it's very likely that a significant number of sumo wrestlers accept bribes to throw rounds.

❝ The theme of Smith's first book, *The Theory of Moral Sentiments*, was the innate honesty of mankind. "How selfish soever man may be supposed," Smith wrote, "there are evidently some principles in his nature, which interest him in the fortune of others, and render their happiness necessary to him, though he derives nothing from it, except the pleasure of seeing it."

Related Characters: Adam Smith (speaker)

Related Themes:

Page Number: 49

Explanation and Analysis

The theory of incentives can paint a pessimistic, amoral view of human nature. At times, the authors have shown, human beings will sacrifice their moral or religious beliefs for the sake of material rewards like money. However, the authors conclude their chapter with a more optimistic account of human behavior. Even if humans will sometimes sacrifice morality for money or prestige, they also tend to have an innate desire to do the right thing. The passage quotes the famous economist Adam Smith, the author of *The Wealth of Nations*, often touted as the founding text of modern capitalism. Smith maintained that humans instinctively want to do good.

It's important to note that Smith *wasn't* saying that humans would do something for nothing. On the contrary, Smith argues that good behavior is, in a sense, selfish—humans do the right thing because they want to experience the pleasure of morality; in terms of incentive theory, good behavior means responding to a moral incentive. Even when humans perform a good deed, there is an economic "transaction"—the exchange of the good deed for a good conscience. There's a famous saying, "There ain't no such thing as a free lunch." As far as economists go, this saying sums up the theory of economic, social, and even moral incentives.

Chapter 2 Quotes

❝ It is common for one party to a transaction to have better information than another party. In the parlance of economists, such a case is known as an information asymmetry. We accept as a verity of capitalism that someone (usually an expert) knows more than someone else (usually a consumer). But information asymmetries everywhere have in fact been gravely wounded by the Internet.

Related Themes:

Page Number: 64

Explanation and Analysis

In this chapter, the authors discuss the concept of information asymmetry. There are many times when two parties are performing a transaction of some kind and one of the parties has more information than the other party. In such a situation, the party with more information has a major advantage. For example, real estate agents have a lot more information about the average price of a house than their clients or buyers, meaning that they can sometimes manipulate other people into accepting a lower or higher price.

It's interesting to note that the authors believe the Internet to be an important weapon against information asymmetry. In effect, the Internet has the potential to eliminate the "middleman" from information exchanges. Instead of having to trust a real estate agent to provide good information about housing prices, people can look up the information with a computer. However, Levitt and Dubner do *not* consider the possibility that the Internet will give rise to new kinds of "experts," who use the power of the Internet to pass on new forms of misinformation (perhaps because Levitt and Dubner were writing in 2005, when the Internet was, in many ways, radically different from its current form).

❝ Armed with information, experts can exert a gigantic, if unspoken, leverage: fear.

Related Themes:

Page Number: 67

Explanation and Analysis

One of the most important themes of *Freakonomics* is the immense power of experts (understood as any people who maintain a near-monopoly on some form of information, and use that monopoly to inform and advise other people). There are a few problems with experts. First, experts can be dishonest to their audiences. Because they know they control all the information, experts sometimes distort the facts in order to influence a greater number of people or advance their own interests. Furthermore, as the passage makes clear, experts are good at manipulating their audiences by using fear. Ignorant laypeople who don't have access to good information might be afraid of doing the wrong thing, especially if the "stakes" of the information are high. For example, a young couple with a child and no knowledge of how to raise it will be frightened of raising the child incorrectly—they'll be likely to listen to experts' advice, whether the advice is good or not.

In part, *Freakonomics* is designed to train people to think for themselves and make use of the data. By studying information on their own, people can avoid experts' manipulations. Notably, Levitt and Dubner aren't saying that all experts are bad, or that people should never trust expert opinion. Rather, the authors are trying to encourage readers to learn as much about the world as possible, so that they can understand expert opinions instead of accepting these opinions blindly.

Roughly half of the white women on the site and 80 percent of the white men declared that race didn't matter to them. But the response data tell a different story. The white men who said that race didn't matter sent 90 percent of their e-mail queries to white women. The white women who said race didn't matter sent about 97 percent of their e-mail queries to white men.

Related Themes:

Page Number: 81

Explanation and Analysis

In this passage, the authors discuss the relationship of racism and bigotry to online dating. There's a tremendous amount of data about people's preferences in online dating (since there are millions of online daters). In practice, a majority of white online daters will date other white people. But interestingly, most of these daters *claim* that race isn't a factor in their dating preferences—despite the overwhelming evidence to the contrary.

The conclusions of the authors' dating studies are a little depressing, but perhaps unsurprising. For the most part, online daters are intelligent enough to realize that specifying their attraction to certain races would invite criticisms of bigotry. So instead, many online daters claim that they're open to all races, and then just date within their racial group.

Chapter 3 Quotes

So the conventional wisdom in Galbraith's view must be simple, convenient, comfortable, and comforting--though not necessarily true. It would be silly to argue that the conventional wisdom is never true. But noticing where the conventional wisdom may be false—noticing, perhaps, the contrails of sloppy or self-interested thinking—is a nice place to start asking questions.

Related Characters: John Kenneth Galbraith

Related Themes:

Page Number: 86

Explanation and Analysis

In this passage, the authors discuss the meaning of conventional wisdom. "Conventional wisdom" was a term coined by the eminent 20th century economist John Kenneth Galbraith. Galbraith was trying to understand why certain ideas and theories become very popular in modern, informed societies. One might think that the most popular ideas are also the truest. But in fact, ideas become popular because they're simple, memorable, and comforting. Truth is somewhat important in an idea's success (hence Galbraith's clarification that conventional wisdom isn't always wrong), but conventional wisdom also dilutes truth with simplicity and comfort.

The authors try to train their readers to distrust conventional wisdom and beware of ideas that seem overly simple and straightforward. For an economist, the world is a complicated, nuanced place, and reality doesn't always mirror one's political, moral, or religious views. In effect, then, a good economist (and a good thinker in general) should weigh many different hypotheses, even if the hypotheses seem immoral, politically incorrect, etc. Conventional wisdom can be a convenient approximation of reality, but it's always better to study the world in a nuanced, open-minded fashion.

So how did the gang work? An awful lot like most American businesses, actually, though perhaps none more so than McDonald's. In fact, if you were to hold a McDonald's organizational chart and a Black Disciples org chart side by side, you could hardly tell the difference.

Related Themes:

Page Number: 96

Explanation and Analysis

In this chapter, the authors study the structure of crack gangs in Chicago's South Side. In doing so, they conclude that the structure of crack gangs has a lot in common with other, more legitimate businesses. For instance, a crack gang is a lot like a McDonald's franchise. Just as local businessmen must pay the McDonald's corporation for the right to operate under the McDonald's name, a crack gang in Chicago must pay the most powerful gang in the city, the Black Disciples, a "cut" of the drug profits in return for the Black Disciples' protection and approval. Similarly, the profits for selling crack—just like the profits for selling hamburgers—flow from low-level workers up to the "top of the pyramid." Thus, the leader of a small local crack gang makes a six-figure salary, while the lowest-level drug sellers make less than minimum wage.

The authors aren't saying that it's morally acceptable to sell crack, or morally unacceptable to work at McDonald's.

Rather, the authors are simply making a descriptive point about the way drug gangs operate—at a structural level, they're like any other business. Such a descriptive point has some political ramifications, however. Levitt and Dubner's research challenges the stereotype that drug dealers are innately evil people by showing that drug dealers use the same basic methods to sell drugs that ordinary businessmen use to sell other products. Whether selling crack is moral or not, drug dealers are trying to make enough money to succeed in life—an economic incentive that any working adult should be able to understand.

> So if crack dealing is the most dangerous job in America, and if the salary was only $3.30 an hour, why on earth would anyone take such a job?
> Well, for the same reason that a pretty Wisconsin farm girl moves to Hollywood. For the same reason that a high-school quarterback wakes up at 5 a.m. to lift weights. They all want to succeed in an extremely competitive field in which, if you reach the top, you are paid a fortune (to say nothing of the attendant glory and power).

Related Themes:

Page Number: 102

Explanation and Analysis

In this passage, the authors try to explain a seemingly inexplicable phenomenon: why do so many people want to sell crack on the streets of Chicago, considering that they have a 1 in 4 chance of being murdered for doing so? Such behavior seems to contradict every instinct of self-preservation in the human body. And yet, as the authors show, human beings are capable of irrational behaviors of all kinds, so long as they're convinced of the potential rewards for their behavior. The drug dealers who work on the streets for minimum wage sell crack so that they can potentially "climb the ladder" and become powerful drug lords later in life.

Like many of the other points the authors make in this chapter, the explanation for why drug dealers risk their lives for the sake of money is both a descriptive, amoral point, and an argument with potentially major political ramifications. For decades, the War on Drugs has demonized drug dealers, accusing them of destroying neighborhoods and families, perpetuating the achievement gap, etc. Levitt and Dubner don't deny these points at all, but they *do* insist that drug dealers are "still people," subject to the same motives and incentives as any other human beings.

> DuPont had pulled off the feat that every marketer dreams of: it brought class to the masses. In this regard, the invention of nylon stockings was markedly similar to the invention of crack cocaine.

Related Themes:

Page Number: 107

Explanation and Analysis

The passage makes a potentially surprising comparison between the sale of nylon stockings and the sale of crack cocaine. Nylon stockings were popular in the early 20th century because they replicated the look of high-class, expensive silk stockings, but for a small fraction of the price. Similarly, crack cocaine became popular in America because it mimicked the effects of cocaine, a drug that was widely seen as a symbol of power, glamor, and wealth.

The passage makes an important point about why people buy things: often, people make purchases to boost their social prestige. Even if two products have the same price and are equally satisfying in a material sense, people will often prefer the product that is perceived as being "classier" and more socially prestigious. In such a way, the consumption of crack cocaine is a powerful reminder of the power of social incentives: people desire the approval of other people, and therefore, they desire products that other people desire.

Chapter 4 Quotes

> The mayor of a city sees that his citizens celebrate wildly when their team wins the World Series. He is intrigued by this correlation but, like the "Moratorium" author, fails to see the direction in which the correlation runs. So the following year, the mayor decrees that his citizens start celebrating the World Series before the first pitch is ever thrown—an act that, in his confused mind, will ensure a victory.

Related Themes:

Page Number: 122

Explanation and Analysis

In this passage, the authors make fun of criminologists who claim that higher prison sentences don't have much of an impact on the crime rate. As far as the authors are concerned, it's perfectly obvious that they do. By contrast, the argument that there is a link between lowering sentences and lowering crime rates confuses correlation and causation. Thus, the authors conclude, criminologists who claim that we could reduce the crime rate by letting more criminals out of jail are as foolish as a mayor who tries to "fix" the World Series by getting his constituents to celebrate victory before the big game even begins.

The passage has been criticized for simplifying the positions of criminologists who argue against excessive prison sentences; in essence, creating a straw man and then tearing it apart. There have been many nuanced arguments against longer prison sentences and higher incarceration rates that don't confuse causation and correlation—for instance, the argument that sending minor criminals to jail for years will corrupt them into becoming serious, hardened criminals for life. Nevertheless, regardless of what one thinks of the arguments for or against prison sentences, it is important to be aware of the differences between causation and correlation, which the passage makes clear.

> First, the drop in crime in New York began in 1990. By the end of 1993, the rate of property crime and violent crime, including homicides, had already fallen nearly 20 percent. Rudolph Giuliani, however, did not become mayor … until early 1994.

Related Characters: Rudolph Giuliani

Related Themes:

Page Number: 128

Explanation and Analysis

In this chapter, the authors look at a long list of hypotheses for why the crime rate went down in the 1990s. One possibility they consider is that new policing techniques, such as the broken window theory, influenced the American public to commit fewer crimes. The broken window theory hypothesized that by monitoring seemingly minor crimes, such as vandalism and graffiti, law enforcement officers could prevent people from committing much more serious crimes, essentially sending a message that crime of any kind would not be tolerated. While the broken window theory has been celebrated as an extremely effective deterrent to crimes of all kinds, the authors conclude that there's almost no statistical basis for such celebration—in New York City, where Mayor Rudolph Giuliani instituted broken window policies in the mid-90s, crime was already going down well before Giuliani's tenure as mayor, suggesting that other factors caused the crime decrease.

The passage is a particularly good example of how economic methods can be used to study complicated phenomena. Depending largely on one's political and moral beliefs, the broken window theory could be interpreted as a highly effective way to fight crime, or a disastrous failure. It might be tempting to believe that broken window policies lowered the crime rate, regardless of the facts. But Levitt and Dubner cut through the "conventional wisdom" and use facts to disprove the effectiveness of such policies.

> Growing up in a single-parent home roughly doubles a child's propensity to commit crime. So does having a teenage mother. Another study has shown that low maternal education is the single most powerful factor leading to criminality.
> In other words, the very factors that drove millions of American women to have an abortion also seemed to predict that their children, had they been born, would have led unhappy and possibly criminal lives.

Related Themes:

Page Number: 139

Explanation and Analysis

In this passage, the authors reiterate some of the points they made in the Introduction about the relationship between the abortion rate and the crime rate in America. Statistically speaking, there is a high correlation between one's likelihood of committing a crime and one's family circumstances: mother's age, being in a single-parent household, mother's educational levels, etc. So it follows that legalizing abortions would have a profound negative influence on the crime rate: indeed, by the 1990s, the crime rate had gone down dramatically, supposedly reflecting the legalization of abortion in 1973.

This argument can be unpleasant, because it involves saying that people from certain backgrounds are more likely to commit crimes. Furthermore, Levitt and Dubner have come under a lot of fire for suggesting that abortions played a major role in the lowering crime rate. Yet they're not saying that abortion *should* be used as a tool to fight crime, nor are they necessarily suggesting that abortion was the only

factor in the lowering crime rate. Their duty as economists is to describe and interpret the data in an unbiased manner, even if their conclusions don't please everyone.

So even for someone who considers a fetus to be worth only one one-hundredth of a human being, the trade-off between higher abortion and lower crime is, by an economist's reckoning, terribly inefficient.

Related Themes:

Page Number: 145

Explanation and Analysis

At the end of the chapter, the authors double down on their controversial position on abortion, and make an even more controversial argument for measuring the "effectiveness" of the abortion rate's influence on crime. The premise of their argument is that a fetus is worth one one-hundredth of an infant baby's life. Therefore, it follows that economists can measure the "net" effectiveness of the abortion rate on crime, factoring in the premise that abortion is a form of murder (or rather, one hundred abortions are equivalent to the murder of one child). Overall, then, the abortion rate has been a highly "inefficient" way of fighting crime.

The authors' argument could be interpreted as provocative, since it puts human life in overly mathematical, material terms, and judges these lives with bloodless words like "efficient" and "inefficient." It's likely that Levitt and Dubner *know* they're being provocative by making observations about abortion—perhaps they are trying to rouse readers away from the conventional wisdom and toward a more objective, rational way of talking about the real world, or at least trying to keep them reading the book.

Chapter 5 Quotes

The typical parenting expert, like experts in other fields, is prone to sound exceedingly sure of himself. An expert doesn't so much argue the various sides of an issue as plant his flag firmly on one side. That's because an expert whose argument reeks of restraint or nuance often doesn't get much attention.

Related Themes:

Page Number: 148

Explanation and Analysis

In Chapter 5, the authors discuss some competing theories about how to raise a child. To begin with, however, the authors discuss the prevalence of experts on child rearing. As with the other experts who appear in *Freakonomics*, parenting experts often aren't to be trusted. The vast majority of these figures, the authors allege, don't really know how to raise a good child. On the contrary, parenting experts excel at seeming sure of themselves, and presenting complicated, nuanced arguments in overly simplistic forms. Parenting experts have a clear economic incentive for simplifying the truth—the simpler and more attractive their ideas, the more time they'll get to spend on TV, or the better their books will sell. With such an economic incentive in place, parenting experts tailor their ideas to fit the conventional wisdom, eliminating nuance and ambiguity—i.e., exactly what John Kenneth Galbraith (who coined the term "conventional wisdom") warned against.

A long line of studies, including research into twins who were separated at birth, had already concluded that genes alone are responsible for perhaps 50 percent of a child's personality and abilities.

Related Themes:

Page Number: 154

Explanation and Analysis

Before embarking on a detailed study of the effects of nurture on a child's academic success, the authors make a few brief observations about the relationship between nature and nurture. They note the numerous studies that conclude that genetics plays a major role in a child's development. Levitt and Dubner suggest that genetics accounts for perhaps fifty percent of a child's personality and abilities—implying that the remaining half of a child's life can be explained by studying nurture.

The passage is significant because it illustrates some of the limitations of economics as an intellectual discipline. The authors have no way of using economics to study *how*, precisely, genetics can influence a child's personality—only biologists, geneticists, and other medical researchers could answer these questions. Instead of conducting in-depth studies of *how* genetics and nurture influence a child, Levitt and Dubner just analyze statistics describing how large groups of children have behaved under different

circumstances. In a sense, then, economists have to study the roles of nature and nurture from the outside.

❝ What appears to be an advantage gained by going to a new school isn't connected to the new school at all. What this means is that the students—and parents—who choose to opt out tend to be smarter and more academically motivated to begin with. But statistically, they gained no academic benefit by changing schools.

Related Themes:

Page Number: 160

Explanation and Analysis

A study of the Chicago Public School (CPS) system yields some surprising results about the role of high school education on academic performance. The data suggested that there is no correlation between the high school a child attends and the child's academic performance. In other words, two children with the same academic abilities (as measured by various tests) will tend to finish high school with the same academic abilities, even if they attend different Chicago schools.

The authors' conclusions are surprising, since one would expect that high school attendance would at least play *some* role in academic performance. The authors clarify their point by adding some nuance to it: it is true that students who transfer to different high schools tend to outperform students who don't take advantage of their option to transfer to a different school. But this doesn't prove that particular high schools improve students' academic performance. Rather, it just proves that there's a selection bias in the process of transferring schools: the students who choose to switch schools in search of a better education are likely to 1) have intelligent parents who recognize the value of a good education, and 2) be more intelligent than the average high school student. In all, the CPS data suggests that academic performance reflects a student's intelligence and talent far more than a teacher's ability to educate.

❝ The data reveal that black children who perform poorly in school do so not because they are black but because a black child is more likely to come from a low-income, low-education household. A typical black child and white child from the same socioeconomic background, however, have the same abilities in math and reading upon entering kindergarten.

Related Themes:

Page Number: 166

Explanation and Analysis

In this passage, the authors analyze the results of a Department of Education study of thousands of American school children. The study measured dozens of different variables—academic performance, family structure, income level, etc.—therefore, it can be used to analyze the influence of these variables on academic performance. The authors find that there is, contrary to some racist claims, no true "gap" between black and white students. While it is true that, on average, white students outperform black students on tests, the reason isn't that black students are innately inferior to their white counterparts; rather, it's that black students, on average, tend to have a lower economic background, and are more likely to be raised by a single parent. In short, the authors use statistics to disprove the racist lie that blacks are inferior to whites.

Chapter 6 Quotes

❝ Until the early 1970s, there was a great overlap between black and white names. The typical baby girl born in a black neighborhood in 1970 was given a name that was twice as common among blacks as whites. By 1980 she received a name that was twenty times more common among blacks.

Related Themes:

Page Number: 185-186

Explanation and Analysis

In Chapter 6, the authors turn to a new subject: baby names. Baby names are a good, convenient metric for human behavior, because 1) information about baby names is easily accessible, and 2) parents spend a lot of time thinking about what to name their children, suggesting that baby names carry a lot of information about the parents' personalities and motivations.

As they often do, Levitt and Dubner begin with a problem in need of an explanation: in the last 30 years, the prevalence of distinctively black names—defined as names for which a sizeable majority of the people who have it are black—has shot up. Since baby names often reflect the parents' political and social beliefs, Levitt and Dubner will try to understand what the black baby-naming trend says about human behavior.

If DeShawn Williams and Jake Williams sent identical resumes to the same employer, Jake Williams would be more likely to get a callback. The implication is that black-sounding names carry an economic penalty. Such studies are tantalizing but severely limited, for they can't explain why DeShawn didn't get the call. Was he rejected because the employer is a racist and is convinced that DeShawn Williams is black? Or did he reject him because "DeShawn" sounds like someone from a low-income, low-education family?

Related Themes:

Page Number: 189

Explanation and Analysis

The authors here consider a study of the role of racism and cultural bias in job applicants' success. According to the study, a fictional job applicant named "DeShawn Williams" would be considerably less likely to get a job interview than a fictional job applicant named "Jake Williams," even if the two applicants have identical resumes. Because "DeShawn" is a stereotypically black name, the study would seem to suggest that American businesses may have a strong bias against black applicants.

The way Levitt and Dubner interpret the data says a lot about their approach to economics. While it might seem clear that the study proves a racial bias in job interviews, Levitt and Dubner don't jump to conclusions. They also consider alternate hypotheses—because the name "DeShawn" correlates with low socioeconomic status, perhaps the job interviewers are biased against people based on class, not race. Ultimately, the authors do not accept the conclusion that all job interviewers are bigoted against black people. They don't deny that this is possible—they simple can't draw such a conclusion from the data as it's presented. A good economist will stick to interpreting the facts, rather than accepting the conventional wisdom or jumping to conclusions without evidence.

There is a clear pattern at play: once a name catches on among high-income, highly educated parents, it starts working its way down the socioeconomic ladder. Amber and Heather started out as high-end names, as did Stephanie and Brittany.

Related Themes:

Page Number: 204

Explanation and Analysis

At the end of the chapter, the authors identify a strange trend in naming: names that are initially popular among affluent families tend to "trickle down" to the middle and lower classes over a certain span of years. Thus, a name like "Heather" was popular in the 1970s and 80s among affluent families, but is now most common among working class families.

The passage emphasizes an important point about human behavior: humans seek the approval of their peers, and often act out of a desire for social prestige. Thus, people give their children affluent-sounding names in order to receive the social incentives of being perceived as a "fancy" family, or in the hopes that their children will grow up to achieve a higher level of wealth and status. However, the process of giving a child an affluent-sounding name is still subject to the laws of the market: the more people give their children such a name, the less social prestige it carries, until eventually, the name becomes associated with middle or working class families.

Epilogue Quotes

Some of these ideas might make you uncomfortable, even unpopular. To claim that legalized abortion resulted in a massive drop in crime will inevitably lead to explosive moral reactions. But the fact of the matter is that *Freakonomics*-style thinking simply doesn't traffic in morality. As we suggested near the beginning of this book, if morality represents an ideal world, then economics represents the actual world.

Related Themes:

Page Number: 210

Explanation and Analysis

The authors close their book by reiterating one of their key points: economics and morality have very little in common. A good economist's job is to analyze the data in an objective way, and then use logic and rationality to interpret the data when necessary. In such a way, an economist might come to a potentially disturbing conclusion—for instance, the conclusion that abortions had a major role in lowering the crime rate in the 1990s. Moral or immoral, such a notion is true—it's an accurate description of the data as it stands.

In general, the passage emphasizes the distinction between descriptive and prescriptive thinking—that is, between what *is* and what *should be*. An economist must describe the data,

leaving it to politicians, religious leaders, philosophers, and others to say what "should" be done.

> The second child, now twenty-eight years old, is Roland G. Fryer Jr., the Harvard economist studying black underachievement.
> The white child also made it to Harvard. But soon after, things went badly for him. His name is Ted Kaczynski.

Related Characters: Roland Fryer, Ted Kaczynski

Related Themes:

Related Symbols:

Page Number: 211

Explanation and Analysis

The book concludes with a description of the two "hypothetical" children discussed in the earlier chapters. As it turns out, these children weren't hypothetical at all: the black child was Roland Fryer, while the white child was Ted Kaczynski, the Unabomber, one of the deadliest terrorists in American history.

On paper, Kaczynski had every conceivable advantage in life: whiteness, maleness, a brilliant mind, loving parents, an affluent background, etc. By contrast, Fryer had tremendous disadvantages: an abusive father, a poor neighborhood, racial oppression, etc. But where Kaczynski squandered his advantages and ended up becoming a dangerous murderer, Fryer overcame obstacles and became a great success at Harvard University. In all, the examples of Kazcynski and Fryer illustrate some of the limitations of economics. Economics is good at describing how, on average, a large group of people will behave. But when dealing with a small "sample size"—in this case, only two people—economics can't predict what people will do. Kaczynski cannot be "explained" in terms of his background, his IQ, or other metrics. There is a limit, in short, to how much economics as a whole can tell us about people, and on the individual level there is always a level of randomness and other unknown factors that cannot be measured.

SUMMARY AND ANALYSIS

The color-coded icons under each analysis entry make it easy to track where the themes occur most prominently throughout the work. Each icon corresponds to one of the themes explained in the Themes section of this LitChart.

INTRODUCTION: THE HIDDEN SIDE OF EVERYTHING

In the early 1990s, there was an increase in the crime rate in the United Sates. The primary causes of the crime wave, according to eminent criminologists, were "superpredators": young, aggressive people who had no respect for the law and committed serious, violent crimes without any guilt. Government officials, criminologists, and sociologists alike believed that the country was headed for "deepest chaos" because of the rise of superpredators. Then, unexpectedly, the crime rate fell; in fact, it fell "astoundingly." By 2000, the murder rate was down to its lowest level in more than three decades. So now the question was: what caused this stunning drop in crime?

One of the strangest social phenomena of modern times has been the declining crime rate of the 1990s. By beginning their book with a discussion of the crime rate of the '90s, Levitt and Dubner, the two authors, create a mystery in need of a solution. To "solve the mystery," they'll use economics—the study of how humans interact with one another through the exchange of goods and incentives.

The reason that the crime rate fell in the U.S. in the late 90s "concerned a young woman in Dallas named Norma McCorvey." In the early 70s, McCorvey—a poor, uneducated, alcoholic—tried to get an abortion. When McCorvey failed to get an abortion, abortion activists took up her cause, making her the lead plaintiff in the famous 1973 Supreme Court case *Roe v. Wade*, the case that determined that women have the right to have abortions. So what do Norma McCorvey and *Roe v. Wade* have to do with the crime rate? In the 1990s, the abortion rate was far higher than it had been in the 70s: abortions were now legal. The reason that the crime rate fell in the 90s (the authors argue) is that mothers in impoverished neighborhoods were having fewer children; instead, they were more likely to get abortions. As a result, there were fewer children being born in impoverished neighborhoods with unloving parents, and therefore, fewer children who were likely to grow up to become criminals. But despite the fact that abortion rates in impoverished communities had a huge impact on the crime rate, not a single government official or criminologist brought up abortion when trying to explain the reduction in crime.

This passage establishes one of the most important points in the book: in order to understand large, complicated social phenomena, we must sometimes look to small, seemingly trivial events and people. Norma McCorvey played a tiny yet decisive role in the Supreme Court case that legalized abortion—a case that had dramatic repercussions for the young population of the United States in the 1990s. The passage also establishes another "mystery"—the mystery of why politicians and sociologists didn't point to the abortion rate as a cause of the declining crime rate. Right away, the book draws a distinction between the facts—mathematical, unbiased, and apolitical—and the political figures who interpret the facts (and who often have to polish their interpretation to fit with a certain political or moral point of view). This suggests another one of the book's key points: the untrustworthiness of so-called experts.

As with the crime rate, few people understand how the world of real estate works. Real estate agents claim that they can help their clients by selling a house "aggressively" and getting the best offer possible—a useful service for which they're paid a "cut" of the price of the house. And yet this claim isn't necessarily true at all. In order to understand how real estate agents, or any other professionals, work, we must first understand what their incentives and motives truly are. For example, in order to understand how obstetricians work, we must accept that obstetricians have an incentive to treat the most expensive procedures, so that they're paid the most money—even if these procedures aren't, strictly speaking, necessary.

The passage proposes a counterintuitive way to talk about real estate agents (or, for that matter, any people who present themselves as "experts"). Instead of focusing on what experts say (i.e., the jargon-filled arguments they use to persuade people to change their behavior), we must look at experts' incentives*—in effect, asking, "What do they have to gain from this transaction?" As we'll see, one can apply an incentives-based analysis to experts in any field, regardless of the experts' persuasiveness, gravitas, education, etc.*

What incentives do real estate agents have? The agent's primary incentive is to make the deal possible on the sale of a home. This is good, because it means that the real estate agent's incentives align with those of the client (they both want to sell the house for the highest price). However, the agent's incentives don't align *equally* with the client's incentives. If, for example, a real estate agent manages to sell a house for an extra 10,000 dollars, the agent herself will only make an extra 150 dollars (her cut of the commissions minor taxes). So even though real estate agents might seem to have every incentive to sell their clients' houses for the highest price, their best course of action is to sell a larger number of houses for an average price, rather than taking the time to sell a small number of houses for the absolute highest price.

One might assume that real estate agents will look out for their clients' interests, both because of their financial motives and because they're nice people. However, when we apply mathematical analysis to the real estate business, it becomes clear that real estate agents' incentives*, regardless of their personalities or moral convictions, don't line up with those of their clients'. In general, studying incentives is a good way to predict how people will behave, even if such a form of analysis can be surprising and even disturbing.*

The authors claim that we can also apply economic methods to the world of politics. Many people maintain that money can be used to "buy" elections. But, technically speaking, it's not clear if money is really the *cause* of electoral victory. The authors then take a moment to look at the difference between causation and correlation. Ideally, scientists and economists try to use research to prove that one phenomenon causes another. But often, the research can't *prove* causation: it can only prove that there is some positive or negative relationship between two phenomena. For example, there's an old fable about a czar who learns that the most disease-ridden places in his empire are also the places with the most doctors. The czar, foolishly concluding that doctors *cause* disease, has all the doctors executed.

The passage introduces an important conceptual distinction between causation and correlation. One reason why so many of Levitt and Dubner's conclusions seem counterintuitive is that people are used to confusing causation and correlation: because two events occur in close proximity to one another, people irrationally assume that one event must cause the other. (For example, people assume that campaign donations cause electoral victories). The book will show readers how to avoid logical mistakes of this kind.

The authors then examine the relationship between campaign donations and electoral results. Often people donate to a candidate because the candidate is already winning the election. Therefore, it can be difficult to say when campaign donations *cause* electoral victories; sometimes, donations merely correlate with the victories. There is, however, one way to tell the difference between causation and correlation with campaign contributions. If Candidate A runs against Candidate B in two consecutive elections, spending different amounts of money in each, and staying equally popular in both elections, we could convincingly measure the causational influence of campaign contributions on electoral victory. When we apply this technique to electoral data, we reach a surprising conclusion: campaign contributions have a minimal impact on election results. A persuasive, popular candidate will be more likely to get donations, but a lackluster candidate with lots of money to spend is unlikely to win an election, contrary to popular belief.

The methods that Levitt and Dubner use to analyze campaign contributions will be important to the book. One of the problems with analyzing data of all kinds is that there are many different variables that could *cause a phenomenon. In the case of campaign contributions, the authors try to isolate one independent variable—campaign contributions—by holding other variables the same (in other words, by studying how the same two candidates perform in consecutive elections). In this way, the authors can attempt to isolate the influence of the independent variable—campaign contributions—on the dependent variable—electoral success.*

There's another common belief that candidates spend huge amounts on elections. In a single election cycle that includes Presidential, House, and Senate elections, one billion dollars are spent on the election. This might sound like a huge sum, but in fact, Americans spend a billion dollars a year just on chewing gum!

Another form of bias that the authors attempt to correct is the tendency to inflate and exaggerate numbers. Dubner and Levitt try to keep figures in perspective—here, for instance, a billion dollars might sound like a lot of money, until one considers how much money Americans spend on more trivial things.

This book, the authors claim, will use the techniques borrowed from economics and statistics to analyze the world and reach some surprising conclusions, like the ones they've discussed in the introduction so far. Economics is an extremely useful form of human inquiry—but unfortunately, too many people think it's really dull. In part, this book was written to show how economic tools can be fascinating.

Most people don't realize that economics can be a useful tool for understanding the way the world works, even in fields far removed from traditional economics. Levitt and Dubner want to teach average people how to use economics to make more informed decisions and eliminate forms of bias.

The authors note that there are a few general rules to keep in mind when reading this book: 1) "Incentives are the cornerstones of modern life." As we saw with real estate agents, it can be useful to study human behavior by talking about people's material motives for acting a certain way. 2) "The conventional wisdom is often wrong." This book will often ignore conventional wisdom, using math and science to show how little people understand their world. 3) Dramatic effects often have distant, even subtle, causes. 4) Experts use their monopoly on a certain kind of information to help themselves. 5) "Knowing what to measure and how to measure it makes a complicated world much less so." In general, then, this book will apply economics to topics that often seem too strange or offbeat to be worthy of economic analysis.

The five rules that the authors list here can seem counterintuitive, because they challenge the way that people may be used to thinking about the world. For example, it's natural to assume that people act a certain way because of their personalities or beliefs. Yet the authors claim that the best way to understand human behavior is to study incentives—in effect, to ask "What do they have to gain?" instead of "What kind of people are they?" Humans also have an irrational tendency to trust large groups and so-called experts. One can use economics to study the world in a rational, unbiased manner, without leaning on experts.

CHAPTER 1: WHAT DO SCHOOLTEACHERS AND SUMO WRESTLERS HAVE IN COMMON?

In day care centers, parents sometimes arrive late to pick their children up. Economists have studied this problem, and proposed that day care centers fine late parents (since it costs extra money to take care of children while they're waiting for their parents to arrive). Strangely, however, when day care centers adopted such a policy, late arrivals went up, not down. How?

Like the Introduction, this chapter begins with a puzzle in need of a solution, creating a sense of suspense (and, as the authors suggested in the Introduction, making economics more exciting!). The authors will then use the theory of incentives to "solve" the puzzle.

In order to understand the day care problem, the authors say, we'll need to think carefully about incentives. Economics is largely the study of how incentives drive human behavior. In simplest terms, an incentive is "a means of urging people to do more of a good thing and less of a bad thing". There are two kinds of incentives: positive and negative ("carrots" and "sticks"). Some incentives are biological; for instance, we instinctively pull our hands away from a hot flame (a negative incentive). But most incentives have to be created artificially; this means that incentives are always changing. For example, by fining a big company for polluting the environment, the government could incentivize the company to decrease its pollutions (another negative incentive).

The first distinction that the authors make is a distinction between positive and negative incentives—in other words, "carrots" and "sticks" (after the proverbial horse chasing a carrot and running away from the stick). Such a distinction intuitively makes sense—we all understand the negative incentive that makes us pull our hands away from a hot flame. Put another way, the concept of incentives suggests that every behavior must have a cause: in all walks of life, people do things because they're either trying to gain a positive incentive or avoid a negative incentive.

Another way to classify incentives is to label them as economic, social, or moral incentives. A government plan to fine smokers would be an economic incentive to reduce smoking. Now the authors apply the three forms of incentives to crime. Why, we might ask, isn't there more crime than there already is? At some point, everyone has an opportunity to steal, cheat, or otherwise break the law. The reason more people don't commit crimes is partly economic—people are frightened of going to jail and losing their jobs and incomes. The incentive is also moral—people think crime is wrong. There's also a strong social incentive: people don't want to be caught committing a crime and humiliated in front of their friends or peers.

The second distinction that the authors make is a distinction between economic, moral, and social incentives. As the crime example would suggest, however, it's often difficult to disentangle the incentives that motivate an action. People refrain from committing crimes for a variety of economic, social, and moral reasons. A further implication of the crime example is that the three forms of incentive can be equally influential under different circumstances—in other words, the authors aren't suggesting that humans always put economics above morality.

In terms of incentives, the problem with the day care center's system of fining adults was that the fine the day care center proposed, three dollars, wasn't big enough. If the fine had been one hundred dollars, it probably would have convinced some late parents to arrive on time. But there's another interesting problem with the fine: by fining late parents, the day care center *replaced* a moral incentive with an economic incentive. In other words, parents who would ordinarily feel the moral guilt of being late to pick their children up could rationalize their lateness by paying a small fine to the day care center, thus freeing themselves from their guilt for a small monetary fee.

This is a particularly subtle example of how incentives can conflict with one another. The daycare fine inspired parents (who had previously conceived of their tardiness in moral terms) to conceive of their tardiness in strictly economic terms—a change that, counterintuitively, resulted in more tardiness. The parents who left their children late could seemingly think of their behavior in moral or economic terms, but less frequently in terms of both.

Another example of the clash between moral and economic incentives came in the 1970s. Doctors discovered that when people are paid for donating blood, less blood is donated overall. The problem with the blood donation incentive program was that it paid a small amount of money (less than fifty dollars) for an action that most people take for moral reasons. In the process, the blood donor center reduced the moral benefit of donating blood, resulting in fewer donations.

In this case, blood donors started out by acting for moral reasons, but eventually acted for economic reasons. Blood donors seemingly found it difficult to conceive of their donations as both an economic and a moral behavior; the fifty-dollar bonus tarnished the blood donation process with self-interest.

The practice of cheating is a good way to understand incentives. Almost everyone has cheated at some point in life: children cheat on tests, and CEOs cheat on their taxes. In 1987, the Internal Revenue Service required taxpayers who listed a dependent child to provide a social security number for each child. Seven million supposed "child dependents" disappeared from tax forms, suggesting that millions of people had cheated on their taxes, falsely claiming they had children.

The passage studies cheating in economic terms, rather than moral terms. While it may be true that cheating is morally wrong, the morality of cheating is largely irrelevant to the authors' analysis. Their primary purpose is to describe data, not to offer recommendations for how people should *behave. Thus, one could certainly say that the 7 million people who falsified their tax returns were morally wrong, but in economic terms they were just responding to strong economic incentives.*

In the Chicago Public School system, the biggest cheaters of all might be teachers, not students. Federally mandated tests measure students' success for each school year; if students don't succeed on their tests, the students' teachers may be punished—passed over for raises and promotions. Therefore, the introduction of federal student testing creates a new economic incentive for teacher cheating.

The authors don't spend a lot of time discussing specific teachers who cheated; instead, they focus on what the group of Chicago schoolteachers did. In part, this is because the authors are taking an impartial, economic view of cheating, not a moral view. While a teacher who falsifies test scores might not be a very good teacher, he or she is simply responding to an economic incentive.

The Chicago Public School system released some of the data for its students' test scores. This allows economists to study how pervasive cheating on federal tests might be. One common way for a teacher to cheat on student tests would be for the teacher to add correct answers to the end of a student's test (i.e., the part of the test where incorrect answers are most common). Statistical analyses of Chicago classes' scores on federal tests indicate that an unexpectedly high number of students in certain classes "choose" the same correct answers for the final ten questions on federal tests—the questions that should be the hardest. It is highly unlikely that students would choose the same correct answers to hard questions, but not the same correct answers to easy questions (or the same wrong answers to easy questions). Based on this principle, researchers estimate evidence of cheating in about five percent of all classrooms in Chicago. The changing economic incentives of cheating drove more teachers to cheat.

The Chicago Public School system study is interesting for a number of reasons. First, the study uses statistics and relative probability to identify teachers who were likely *to have cheated. In other words, it is difficult for the study to prove to a certainty that certain teachers cheated; the results of the study can only suggest the likelihood of cheating on certain tests.*

There's been some controversy over the prevalence of cheating in Chicago schools. In 2002, the CEO of the Chicago Public School system, Arne Duncan, decided to reduce teacher cheating, reasoning that doing so would help the underprivileged students of Chicago, who needed to learn. Duncan identified 120 classrooms, some of which had been identified as having teachers who may have cheated. This time, teachers weren't allowed to be in the room with their students when they were tested, or handle their students' tests. When the results came in, students did considerably worse on their tests than they'd done originally: without teachers to help them cheat, the students didn't succeed. Duncan publicized news of the cheating study, hoping that the news would act as a warning to teachers next year. Sure enough, cheating fell 30 percent the next year.

Duncan was able to 1) identify that cheating was, indeed, occurring in Chicago classrooms, and 2) use his influence, and the influence of his study, to reduce cheating the next year. Duncan's actions foreshadow the ideas of the second chapter: Duncan used information and publicity to intimidate or shame Chicago teachers into changing their behavior. The next year, Chicago teachers had the same positive economic incentives for cheating, but they also had to consider the negative economic incentives of being caught.

Sports and cheating "go hand in hand." Athletes have a huge economic, social, and even moral incentive to win. In Japan, sumo wrestling is a highly prestigious sport: sumo wrestlers are big celebrities, with the most famous earning millions of dollars. There is a complicated system for ranking sumo wrestlers, and that ranking system largely determines the wrestler's success. If a wrestler wins more than half of his matches (i.e., 8 out of 15) at one of the prestigious sumo tournaments, then his ranking rises; if not, it goes down. For this reason, a wrestler's eighth match is especially important in determining his rank. In terms of incentives, a wrestler with a 7-7 record has much more to gain from a victory than does an opponent with an 8-6 record. So it's possible that in tournaments, wrestlers with 8-6 records will allow opponents with 7-7 records to win.

For the next example the authors discuss, the economic incentives are plain: successful sumo wrestlers make a lot of money, and they enjoy a tremendous amount of social prestige in Japan. Therefore, it would seem that the social and economic incentives for cheating in sumo wrestling outweigh the negative moral incentives of doing so. Sumo wrestling is a particularly good example of the power of economic studies, since, on the surface, it seems almost impossible to measure whether sumo wrestlers cheat: sumo wrestling is such an unpredictable sport that it would be difficult to separate legitimate matches from rigged matches.

But how can we measure cheating in sumo wrestling? First, the authors focus on bouts between 7-7 wrestlers and 8-6 wrestlers. One reason to do so is that it's the simplest way to isolate the wrestlers' incentives. A wrestler with a 14-0 record will have his own conflicting reasons for taking a bribe and intentionally losing his 15th match (on one hand, he wants the first-place prize money; on the other hand, he might get a bribe for losing). An 8-6 wrestler in the same position, however, would not have these strong confounding motives for turning down a bribe.

In order to analyze sumo wrestling, the authors begin by isolating some variables. A 7-7 wrestler will have a very strong positive incentive for winning a match, while an 8-6 wrestler will have a smaller incentive. Thus an 8-6 wrestler has a strong incentive for accepting a bribe and very little incentive for turning it down; he probably won't win the tournament either way.

Based on all past data, a 7-7 wrestler *should* beat an 8-6 wrestler about 48 percent of the time. In actuality, however, 7-7- wrestlers defeat 8-6 wrestlers about 80 percent of the time. There is such a large difference between the real and expected outcomes that it stands to reason that many 8-6 wrestlers take bribes or otherwise plan to lose their matches. Another good way to estimate bribery in sumo matches is to look at what happens the *next* time the same 7-7 and 8-6 wrestler compete; i.e., when neither wrestler is in a "bubble" match. Statistics show that 7-7 wrestlers defeat 8-6 wrestlers for a second time only 40 percent of the time. This is probably because the two wrestlers make a deal: the 7-7 wrestler wins the first time, and the 8-6 wrestler wins the second time. A final way to measure cheating in sumo is to look at 7-7 vs. 8-6 matches shortly *after* there have been major allegations of cheating. In this situation, 7-7 wrestlers win their matches against 8-6 wrestlers about 50 percent of the time. Thus it is highly likely, based on the data, that sumo wrestling is a corrupt sport in which wrestlers regularly take bribes to throw matches.

The authors' analysis persuasively suggests the prevalence of bribery in the sumo wrestling world. On the surface, one would expect an 8-6 wrestler to beat a 7-7 wrestler slightly more than half of the time; in reality, the 7-7 wrestler wins considerably more often. Notice that the authors do not (and, in fact, cannot) pinpoint which *wrestlers do and don't take bribes. It would be very difficult to analyze specific sumo matches and decide which ones are legitimate and which ones are rigged. By studying the sport of sumo wrestling as a whole, however, economists can estimate that a significant number of wrestlers cheat, without having a very good idea of which wrestlers they are.*

Another illuminating example of corruption lies with a man named Paul Feldman. Feldman was a government researcher during the 1960s, but among his colleagues, he was famous for being "the guy who brings in the bagels." Feldman always made a point of bringing bagels to work. Years later, Feldman decided to quit his job and "bring bagels" full-time. Feldman would travel to hundreds of companies and bring fresh bagels. Instead of charging the companies upfront for the bagels, Feldman used an honor-system collection format—he would come back to companies in the afternoon to see if anybody had eaten a bagel and left some money. Amazingly, Feldman made a healthy living bringing bagels to workers.

So far, one could argue, the examples from this chapter have painted a pretty cynical picture of human nature. While the authors don't focus their attention on the moral implications of the data, it would seem that a significant number of people are willing to break the law or bend the rules in order to protect their own interests. For the final case study in this chapter, however, we'll see that humans can also be surprisingly honest and trustworthy.

As a "bagel guy," Feldman would personally go to different companies. Sometimes, he would find that people hadn't obeyed the honors system, and had eaten bagels without paying for them. Sometimes, Feldman would leave collection boxes at his various companies, and come back to collect the boxes later. Although company employees would occasionally eat bagels without paying for them, very few people would steal the collection boxes themselves.

Feldman's career suggests some interesting things about human behavior. People will occasionally "cheat" by eating bagels without paying, and yet they will almost never steal entire boxes of money, despite the fact that their economic incentive for stealing boxes is much greater than the economic incentive for stealing one bagel.

Feldman's example tells us a lot about what's usually called "white-collar crime." At large companies (like the ones to which Feldman delivered bagels), there are certain people who embezzle company money—that is, people who cheat and steal. White-collar crime is relatively rarely prosecuted, and often unsolved (whereas murders and burglaries are solved and prosecuted in the majority of cases). So perhaps "bagel theft" could be used as a measure of white-collar crime in a business setting.

One of the premises of Freakonomics *is that we can understand a lot about society and humanity by studying seemingly trivial things like sumo wrestlers, bagel thieves, etc. While stealing a couple of bagels might seem unimportant, it's a useful benchmark of the overall amount of crime and cheating in a group.*

In recent years, there have two major trends in the bagel payment rate for Feldman's company. First, bagel payment rates slowly declined after 1992. Second, payment rates increased noticeably after September 11, 2001, perhaps reflecting a "patriotic surge" in the businesses Feldman served. Feldman has also observed that smaller businesses tend to be more honest than large ones. Furthermore, the bagel data suggests that one's personal mood correlates with one's likelihood to commit a crime. Pleasant weather often correlates with a higher payment rate. The Christmas holiday correlates with a lower payment rate, while other holidays, like the 4th of July, correlate with a higher pay rate.

The same rule is seemingly true of cheating teachers in Chicago and bagel thieves in Washington, D.C.: the actions of the minority who break the rules are not as random as they seem. One might think that the prevalence of bagel theft is basically unpredictable, but in fact, bagel theft is subject to a wide array of environmental influences, including holidays and the weather. Even if individual human behavior is unpredictable, economics can analyze the behavior of a group.

In short, Feldman's bagel data reflects "the intersection of morality and economics." The vast majority of people Feldman serves do not steal bagels—a conclusion that perhaps reflects the writings of Adam Smith, the famous 18th century economist. In his book, *The Theory of Moral Sentiment*, Smith posits that humans are innately honest; by default, they care about helping other people and making others happy. Of course, many thinkers and economists take exactly the opposite point of view. The ancient Greek philosopher Plato repeated a fable about the "ring of Gyges," in which a humble shepherd discovers a ring of invisibility. Without any consequences for his actions, the shepherd wore his ring and used it to kill, rape, etc. Plato and Smith exemplify two competing views of human nature. Feldman's data suggests that, the vast majority of the time, human beings will be honest, perhaps suggesting that Smith was right about human nature.

Although the authors have been focusing on crime and cheating in various sectors of life, they end the chapter by looking at the "big picture." While it's surprising that five percent of teachers cheated in Chicago schools, perhaps the more surprising fact is that 95 percent of teachers did not—the moral and social incentives of obeying the rules kept them honest. While the authors don't attempt a philosophical analysis of good and evil, they do suggest that humans have an innate sense of good that leads them to obey the rules, even when they have no practical reasons for doing so. Sometimes, goodness (and the moral incentive that accompanies it) is its own reward.

CHAPTER 2: HOW IS THE KU KLUX KLAN LIKE A GROUP OF REAL-ESTATE AGENTS?

The Ku Klux Klan was founded shortly after the Civil War ended. The Klansman used terrorist methods—arson, intimidation, murder, etc.—to frighten newly emancipated slaves. The Klan also used pamphleteering to spread its ideas. But despite the Klansmen's attempts to fight post-war Reconstruction in the South, the federal government continued to keep troops in the Southern states until 1876. After this time, the Klan died down until 1915, when the classic silent film *The Birth of a Nation* inspired the Klansmen's rebirth.

The chapter begins with a quick history of the Ku Klux Klan. Freakonomics *isn't a history book by any means, but the following passages are necessary to stress the importance of secret information in the KKK, a concept that will be important to the studies the authors discuss later in the chapter.*

In the 1920s, the Klansmen numbered at least 8 million. They held meetings across the country, criticizing blacks, Jews, Catholics, communists, unionists, and other so-called "degenerates." During World War II, the Klansmen again died down. In the 50s and 60s, however, the Klansmen experienced another revival in Atlanta.

Even though the KKK is a horrible, racist organization, Levitt and Dubner's first priority is to study it in economic terms, not to condemn its actions, and so they don't adopt an overly moral tone here. (Although it could be argued that they choose the KKK as a subject in order to be deliberately provocative and "edgy.")

During the 1920s, a man named Stetson Kennedy was born in Atlanta. Kennedy belonged to a long line of Klansmen, dating all the way back to the Reconstruction era. Yet Kennedy himself was a fervent opponent of racism, and spent much of his adult life collecting the folk tales of African Americans in the South. Kennedy despised the bigotry of the Ku Klux Klan, and penned an *exposé* of the Klansmen's history.

As we'll soon see, Kennedy's exposé was extremely harmful to the Ku Klux Klan because it interfered with the Klansmen's monopoly on particular forms of information.

One way to study the history of the Ku Klux Klan is to look at the number of lynchings in the U.S. by decade. For years, the Klansmen would capture black men and murder them, often as "punishment" for crimes they hadn't committed. Statistically, there's been a marked decrease in lynchings in every decade since the 1890s. Another striking fact about lynchings in the U.S. is that, although even one lynching is too many, lynchings were never one of the primary causes of death for the black population in the United States. At the height of the Klansmen's power, a few dozen black people were lynched every year—a surprisingly small number compared to the 10,000 black children who died of pneumonia and other diseases every year. So why, at the height of the Klansmen's power, were relatively few black people lynched?

This passage is perhaps the clearest example of the authors' impartial, analytic tone, because the events they're describing are morally despicable. Levitt and Dubner describe how the KKK murdered black men for decades. But instead of talking about the obvious brutality and racism of the KKK's actions, they pose a different question: why didn't the KKK kill more *black men than they actually did? One could say that this question is offensively literal, or that it trivializes the KKK's actions (by suggesting that lynchings were a minor cause of death). But Levitt and Dubner are economists: their job is to describe and analyze people's behavior, often keeping their own moral positions out of the picture.*

One hypothesis for the low number of lynchings each decade is that lynchings were intended to intimidate the black population. The Klansmen wanted to prevent black people from voting, riding the bus, etc.—and in order to scare the black population into submission, it would sometimes execute a black man. Perhaps a small number of lynchings were "effective" in frightening the black population into remaining docile and segregated.

The KKK's lynchings were effective because they inspired fear in entire black communities: instead of intimidating each black citizen individually, the KKK spread the news of lynchings across the country, intimidating black communities to "fall in line." Morality aside, this program has a lot in common with Duncan's strategy for fighting teacher cheating, as described in the previous chapter.

To return to the life of Stetson Kennedy: after writing his book on the Klan, Kennedy became frustrated because he thought he'd done no real damage to the Klan. It occurred to Kennedy that he could do real, lasting damage to the Klan by passing on the Klansmen's passwords to the public. Kennedy began passing Klan passwords along to radio stations. The plan worked, and news of the Klan's cruelty and corruption spread across the country. Radio hosts across the country continued repeating Klan passwords, infuriating Klansmen. Kennedy is often credited with turning the public's sympathy against the Ku Klux Klan, both by circulating the Klan's passwords and by circulating criticism of the Klan. Kennedy understood that information is power—once secret information becomes public, the people who controlled the secret information lose much of their power.

Kennedy understood that the KKK were powerful because they'd mastered the art of controlling information: for example, they know how to spread word of a lynching in order to frightened black people into obedience. Kennedy was able to beat the KKK at its own game, circulating their "secret" information to the public. In doing so, Kennedy probably "outed" a few KKK members, since people were able to understand the members' secret passwords. He also mocked the KKK by drawing attention to the society's strange nicknames and organizational terms, and disorganized them by forcing them to find new passwords and names.

Another example of the power of information: in the 1990s, life insurance policies became considerably cheaper. The reason for this change was the rise of the Internet. People could now search for a cheaper life insurance policy, whereas in the past, people would sometimes spend an unnecessarily large amount of money on a policy that could have been purchased for a lower price somewhere else. In general, the Internet helped to "shrink the gap" between experts and the public. With the help of online searches, ordinary people could find information on their own instead of trusting in so-called experts (who would often give them the wrong information, anyway).

One possibility that Levitt and Dubner don't seem to consider (perhaps because they're writing in 2005, at a time when the Internet was very different) is that the Internet will foster the emergence of even more "experts": pundits, bloggers, and other people who fit the basic profile the authors are disparaging here.

Economists call the difference between the knowledge of two parties "information asymmetry." The world of finance is full of examples of information asymmetry—for instance, during the Enron scandal of the early 2000s, Enron executives lied to their stockholders and customers by saying that the company was far more financially healthy than it really was, and the asymmetry benefitted Enron executives and hurt stockholders. Enron executives passed themselves off as "experts" in their own business, and promoted false information. Furthermore, Enron executives were trying to keep information as asymmetrical as possible: they wanted to keep stockholders in the dark about the realities of the company.

The business world is full people who abuse their special access to information. During the Enron Scandal, the powerful Enron Corporation, which provided and traded energy, went bankrupt, and tried to defraud stockholders. Enron executives understood the importance of the information they guarded (i.e., the fact that their corporation was losing money). Therefore, they prevented this information from reaching stockholders. In the end, Enron couldn't hide the truth: the information asymmetry ended, and stockholders sued the company.

In many different walks of life, so-called experts use their monopoly or near-monopoly in information to help themselves and potentially hurt their customers and clients. Experts claim that the information they guard is too complicated or confusing to be revealed to the public; then, they use the public's ignorance to create fear. For example, an insurance salesman with a near-monopoly on information about the prevalence of heart attacks could create fear in the minds of his customers, and sell lots of overpriced life insurance policies.

One of the expert's most persuasive techniques is to inspire fear in his clients' and customers' minds. Because a salesman's clients might be ignorant of the facts, the salesman could use fear to pressure his clients into buying his product. Levitt and Dubner are "experts" in the sense that they have advanced degrees—but in part, their intention in writing this book is to teach people how to think freely and question other experts.

Consider a textbook example of information asymmetry: selling a house. When a person sells a house, there are two major dangers: 1) setting the price too low and 2) setting the price too high. The job of a real estate agent is to find the "golden mean" between 1) and 2). But, as we saw in the Introduction to this book, real estate agents don't always have their client's best interests in mind: indeed, their monopoly on information about the real estate market may encourage them to sell a house for too cheap.

As we saw in the Introduction, a real estate agent's incentives don't always line up with those of the client. Given what we've learned about how experts use fear and ignorance to pressure people into changing their behavior, we can start to understand how real estate agents might convince their clients to sell their houses for a lower price than they'd like.

The authors of the book recall a close friend, "K." K. wanted to buy a house for 450,000 dollars. K. phoned the seller's agent and asked the agent to name the lowest price the homeowner might accept. The agent scolded K. for asking such an unethical question. But then, the agent said, "My client is willing to sell this house for a lot less than you might think." After the conversation, K. offered 425,000 dollars for the house. So because of his own real estate agent's actions, the seller of the house lost 20,000 dollars. Meanwhile, the agent himself lost only 300 dollars (his "cut" of the commission on the house).

This is one of the few first-person anecdotes in the book, since, for the most part, the authors seem to prefer to deal with unbiased mathematical analysis. However, the example is important because it shows how, in practice, real estate agents with economic incentives might persuade their clients to act in a certain way. (Levitt and Dubner go on to provide their usual mathematical analysis of real estate agents in the following sections).

The job of a real estate agent, in a nutshell, is to persuade clients to sell their houses for less than they might like, while also letting potential buyers know that they should bid low. Real estate agents have many subtle ways of relaying information to potential buyers. For example, listing a house as "well-maintained" might sound like a good thing to the seller of the house. But in reality, the phrase is "real estate code" for a house that's old but not quite falling down. Secret phrases like "well-maintained" function in the same way as passwords for the Ku Klux Klan: they convey a secret message in addition to the explicit meaning of the phrase itself.

Real estate agents use "passwords" to communicate with one another, and with savvy clients who happen to "speak their language." The comparison that the authors draw between real estate agents and the KKK might seem offensive or deliberately provocative—but the authors try to convince us that they're concerned with the underlying structure *of the two groups' behavior, not the morality of the groups themselves.*

Statistics show that there are many real estate terms associated with a higher or lower final sale price. While it's difficult to show causation between use of these phrases and final price, it's clear that the phrases are intended to convey a secret message. One could say that real estate agents are "bad" people for using coded language and sometimes taking money out of their own clients' pockets. But such a question is also "hard for us to say." Real estate agents have strong economic incentives to behave a certain way: the question of whether they're good or bad for behaving this way is beyond the scope of economics itself.

The authors clarify their position: they're certainly not trying to equate real estate agents with Klansmen; rather, they're trying to suggest that the same system of economic incentives can be used to analyze almost any human behavior or group of people—whether the people are real estate agents or members of the KKK.

In the age of the Internet, the power of real estate agents has decreased dramatically. People selling their homes can go online and find their own information about the price of houses. They can also look up some of the more overused real estate "code words." Since the emergence of the Internet, the gap between a homeowner's "starting price" and the final price has decreased by a third, a sign that the information gap between seller, buyer, and real estate agent has decreased as well.

The Internet has been a powerful weapon for fighting experts' abuse of power (at least at the time of the authors' writing—it could be argued that by now, more than ten years later, the Internet has become a hotbed of false information and fear-mongering). In effect, the Internet is a source of free information—including much of the information that experts try to guard and conceal.

We all exploit information asymmetry, whether we're "experts" or not. On dates, or in job interviews, people try to project an image of themselves that isn't always entirely accurate.

The authors don't want to give the impression that people who abuse their access to information are automatically bad or evil. On the contrary, almost all people abuse their access to information.

Another interesting case study of bigotry was the TV show *The Weakest Link*. On this show, a group of contestants had to answer trivia questions. After each round, the contestants would vote off one member of their own group. In theory, the only factor that should matter in voting off a member is the member's ability to answer trivia questions. But in fact, studies suggest that age, gender, and race are all factors in voting.

The Weakest Link *is an especially good way to study bigotry and racism because there's a clear financial motive at play: the contestants are trying to win money. Because the contestants' economic motives are the same, it's easier to isolate their bigoted behaviors.*

It's important, when discussing the potential bigotry of *The Weakest Link*, to keep in mind that the show is being filmed on a camera and watched by millions of people. So perhaps this explains why, overall, there doesn't seem to be a strong bias against black or female contestants: the contestants' *awareness* of the prevalence of discrimination against women and black people causes them to be careful *not* to discriminate against these two groups on camera. However, it would seem that Latino and elderly contestants are often discriminated against. In particular, Latinos suffer from "information-based discrimination"—other contestants seem to believe that the Latino contestants' trivia abilities are lower than they really are, meaning that a disproportionate number of Latinos are eliminated in the first half of the game. On the other hand, elderly contestants are the victims of "taste-based discrimination"—i.e., other contestants don't want to be around elderly people, meaning that a disproportionate number of elderly people are eliminated in the second half of the game.

TV shows are an interesting way to test people's racism and bigotry, because a lot of racism takes place "behind the scenes," either through private behavior or coded language. On a game show, however, millions of people are watching the contestants—perhaps explaining why there's relatively little bigotry directed at black and female contestants on The Weakest Link *(as these forms of bigotry are somewhat easier to identify and condemn). The authors use the data to distinguish between two different kinds of racism: taste-based racism and information-based racism. So not only can the authors identify a bias against elderly and Latino contestants, they can also use the order in which the contestants are eliminated to posit the existence of different* forms *of bias.*

Dating websites have become hugely popular in the United States. People share information about themselves with complete strangers. Economists have tried to measure how honest people are when they post "ads" for themselves on dating websites: do they lie about their weight, their height, their jobs, etc.? Indeed, studies have found that a disproportionate number of people on dating websites claim to earn more than 200,000 dollars per year—suggesting that a significant portion of online daters lie or exaggerate their incomes. Similarly, a disproportionate number of women on dating websites claim to be blonde. Economists have identified many other notable trends for online dating. Men who say they want short-term relationships do worse than men who say they want long-term relationships; but for women, these figures are reversed.

Because the "stakes" of romance are so high, it's expected that people will lie, exaggerate, and otherwise twist the truth to their advantage. Moreover, because romance is such an important part of life, it's easy to predict the kinds of biases and lies that one finds on a dating website. For example, there's a common stereotype in America that blonde women are more desirable; thus, it makes a certain amount of sense that a disproportionately large number of women on dating sites claim to be blonde.

One of the most interesting trends for online dating was racial preference. On most dating sites, people are given the option of specifying races they prefer or avoid. But the fact that this information is public suggests that many people using online dating will conceal their actual preferences and instead say, "it doesn't matter." But in practice, the vast majority of people using online dating meet people within their racial group. Studies estimate than an Asian man will receive a quarter of responses from white women that an equally handsome, rich, and well educated white man would receive.

Racial preference on dating sites is similar to racist behavior on The Weakest Link*: the fact that (potentially) millions of people are looking at an online user's profile makes the user more likely to publicly* claim *to be racially tolerant, whatever their private biases might be. This would suggest that social incentives play a major role in dating profiles—the negative incentive of being stigmatized for racism causes many people to claim that they don't prefer specific races (even though their behavior shows that they clearly do).*

There is, in short, a major gap between the information we give in public and the information we secretly know to be true. In the 1989 New York mayoral race between Rudolph Giuliani (a white man) and David Dinkins (a black man), Dinkins won by a few percentage points. Surprisingly, exit polls showed Dinkins winning by a full 15 points. This would suggest that some New Yorkers who had voted for Giuliani didn't want to be thought of as racially prejudiced, and falsely claimed to have voted for Dinkins.

Even in an exit poll, which is supposed to be anonymous, people are sometimes afraid of being identified as racists. Such subtle "incentives" always complicate economic analysis of data.

David Duke, the infamous leader of the Ku Klux Klan, ran for public office on several occasions, but never succeeded. Duke compiled a mailing list of thousands of Klansmen, hoping that his "base" would propel him to the governorship of Louisiana. When Duke failed to become governor, he sold his mailing list to the governor of Louisiana for 150,000 dollars. In public, or around Klansmen, Duke tried to project an image of trustworthiness and integrity. But in fact, Duke was a corrupt politician who "sold votes" to pay for his gambling habit.

Although many people abuse their access to information, some of these people are worse than others. David Duke, the former leader of the KKK, wasn't just a brutal racist; he was a big-league liar who used his influential position to sell votes to Louisiana politicians. Even if all people twist the truth, there are few who would dare to lie so egregiously.

CHAPTER 3: WHY DO DRUG DEALERS STILL LIVE WITH THEIR MOMS?

When economists try to answer complex questions about the world, they often contradict the "conventional wisdom." The phrase "conventional wisdom" was coined by the economist John Kenneth Galbraith. Galbraith considered "conventional wisdom" to be the enemy of truth. It is too easy, Galbraith argued, to believe something simply because one's peers believe it, too. Thus, conventional wisdom is often simple and convenient—but not necessarily true.

In this important passage, the authors bring up the concept of "conventional wisdom"—the theories and superstitions of the general public. If there is a villain or antagonist in this book, it's conventional wisdom—the enemy of logic, science, and reason.

Advertising is a powerful way to create conventional wisdom. Listerine advertisers were responsible for popularizing a little-known medical term *halitosis* (bad breath). They successfully convinced millions of Americans that having bad breath was a disease, for which Listerine was the only cure.

Advertising agencies are especially adept at manipulating conventional wisdom; by influencing millions of radio listeners and TV watchers, they created a new "disease" out of thin air.

One interesting challenge to the conventional wisdom was the statistic that the majority of crack dealers in the 1990s lived with their mothers. In the late 1980s, at the height of the so-called "Crack epidemic," a sociology Ph.D. candidate named Sudhir Venkatesh decided to research poverty in poor neighborhoods of Chicago. Sudhir visited apartment buildings on Chicago's South Side, many of them very dangerous. On one occasion, he encountered gangs who threatened to kill him. Sudhir met a gang leader named J.T., a college graduate who'd briefly worked as a manager. J.T. agreed to let Sudhir study how he ran his gang. Sudhir got to interview gang members and even record gang meetings. One of Sudhir's most important interviewees was a gang member named Booty. Booty gave Sudhir some priceless information: four notebooks full of the gang's financial records: drug sales, business strategies, death benefits for dead gang members' families, etc.

Sudhir exemplifies the commitment to truth, rationality, and empiricism that the authors celebrate. He was even willing to risk his own life in order to study the drug trade in Chicago. J.T.'s success as a drug dealer suggests that the drug business, contrary to popular belief (or rather, conventional wisdom), isn't all that different from any other business—as we'll see, the same management and business techniques can be used to sell crack cocaine or McDonald's hamburgers. And like any successful business, J.T.'s crack gang kept good financial records—an invaluable tool for Sudhir.

Later, Sudhir went to study at Harvard. It was there that he met Steven Levitt (one of this book's authors). Levitt was fascinated with Sudhir's research, and particularly the business records the Chicago drug gangs kept. The organization methods that Chicago gangs appeared to use were almost indistinguishable from the organization methods of a McDonald's franchise. Much like a McDonald's franchise, J.T. ran one branch of the Black Disciples gang. J.T. was a manager, who reported to a centralized "board of directors." J.T. paid his board 20 percent of his gang's revenues, in return for the right to sell crack in his territory. J.T. had different employees, including enforcers, foot soldiers, and runners. J.T had to compensate his employees and pay his board a monthly fee—but after these payments, he enjoyed an annual salary of about 100,000 dollars.

The authors aren't saying that crack gangs are the same as McDonald's franchises, but they are suggesting that the same business methods can be used to sell either crack or fast food. One important principle of business management is that local businesses can make a higher profit by working on behalf of a larger business—a board of directors. In the case of J.T.'s gang, the local gang represented itself as a "franchise" of the Black Disciples. In return for the Black Disciples leaders' approval, J.T. had to pay 20 percent—a small sacrifice, considering how much money he made as a Black Disciple gang leader.

J.T. made a good living as the head of his gang. But his employees didn't do so well. The lowest level employees, foot soldiers, were responsible for doing business with crack users. Many foot soldiers made such small amounts of money that they had to live at home with their mothers (answering the question posed in this chapter's title). At times, foot soldiers had to fight to protect their supplies of drugs, and they often went to jail. Sudhir calculated that foot soldiers had a one in four chance of being murdered.

J.T.'s gang isn't so different from other businesses: almost all the profits flow to the "top of the pyramid." This seems especially unfair in the case of a crack gang, since the people who assume the greatest risk (the foot soldiers) are also the most underpaid—they're not just working long hours doing menial labor (as in most businesses), but even risking their lives for minimal pay.

Why would anyone take a job that offered a one in four chance of being murdered? For the same reason that people move to Hollywood or wake up early to lift weights: because they want to succeed and "make it to the top." Furthermore, many of the people who became foot soldiers in Chicago had no clear alternatives—they couldn't get an education or find a safe, well-paying job. So the problem with crack dealing is the problem with so many other professions: a lot of people vie for a small number of "prizes." One consequence of this feature of the crack business is that being a foot soldier doesn't pay very well—because the demand to be a foot soldier is so high, wages are low. Many of J.T.'s foot soldiers left the job after they realized they weren't going to be promoted—but more foot soldiers would always replace them.

If it's irrational for foot soldiers to risk their lives for a meager salary, then it's also *irrational for aspiring actors to move to Hollywood and wait tables. There are hundreds of businesses with enthusiastic applicants at low-level positions—so enthusiastic that they're willing to work long hours for minimum wage, in the hopes that they'll be promoted and make more money. Of course, it doesn't take time for these employees to lose their enthusiasm, once it becomes clear that they stand almost no chance of getting promoted. Thus, J.T.'s foot soldiers tended to leave the crack business early on.*

At one point, J.T.'s gang got into a drug war with a rival gang. During this war, J.T. saw many of his foot soldiers leave the drug world altogether, since their chances of being killed were much higher. J.T. also saw his profits going down, since people were frightened of buying drugs (since they could get caught in the middle of a gunfight between the two gangs). In the end, J.T. managed to avert a full-scale drug war by ordering his foot soldiers to use force as sparingly as possible. In this way, he increased his profits, and, by "leading by example," he convinced the rival drug gang to limit its use of force as well. At the age of 34, J.T. was promoted to be a member of the Black Disciples' board of directors. But soon afterwards, he was sent to prison for dealing drugs.

Although the foot soldiers' behavior could be described as irrational (since they were endangering their lives every day), the authors suggest that even irrational behavior can be analyzed in terms of incentives. Thus, when the danger of getting shot while selling crack increased, more foot soldiers left the gang. The sudden ending of J.T.'s story reminds us that, even if the drug trade works *like any legitimate business, it's not a legitimate business—drug dealers can easily go to jail just for "working."*

What, the authors ask, does crack cocaine have to do with nylon stockings? In 1939, nylon stockings were becoming trendy in the U.S. They were affordable, attractive, and long lasting. Most importantly, they looked almost the same as classier silk stockings: thus, they were marketed as an affordable alternative to silk. By the same token, in the late 1970s and early 1980s, crack cocaine was "marketed" to Los Angeles drug users as an affordable alternative to cocaine, the most glamorous and expensive drug in the United States.

One of the most important reasons that people buy products is because they're trying to seek the approval of their peers through the pursuit of social status. Thus, people buy apparently fancy products like nylon stockings and crack cocaine in the hopes of gaining some of the status associated with silk stockings and "regular" cocaine.

In the 1980s, crack cocaine had become a hugely popular drug in the U.S. In response to the drug epidemic, the courts modified the criminal code to allow for harsher sentences for drug dealers. In a bitter irony, however, the growing number of drug dealers who went to prison established new contacts with their fellow inmates, including Colombian drug dealers, so that when the drug dealers were released from prison, they returned to selling crack with greater sophistication. The crack epidemic strengthened gangs throughout the United States, because it became increasingly profitable to become a gangster. Before the crack epidemic, gangs would often break apart as gangsters started to raise families: it was impossible to be a gangster and make enough money to support a wife and children. But following the rise of the crack epidemic, gangs began making enough money to support families, and they sold so much crack that it devastated entire neighborhoods. The crack epidemic probably increased the "gap" between white and black Americans: greater numbers of black people went to prison, the achievement gap between black and white schoolchildren grew, etc.

In this important section, the authors give a history of the so-called "War on Drugs" in the U.S. As the authors point out, the federal government's attempts to eliminate the drug trade by sending more dealers to jail ultimately backfired, strengthening the drug business by allowing dealers to make useful connections while they were behind bars. Another important thing to notice in this section is the discussion of the achievement gap between black and white Americans. The achievement gap has been the subject of much economic analysis in the last fifty years, and in the following chapters of the book, Levitt and Dubner will try to study it using the concept of incentives.

Many criminologists predicted that the crack epidemic of the 1980s would continue to cause major violence in American cities in the 1990s. But in fact, this did not happen: the crime rate began to decrease in the 90s. This was because "another remarkably powerful ripple effect—this one moving in the opposite direction—had just come into play."

Although this is a serious work of economics, it's also designed to be entertaining; thus, the chapter ends on a note of suspense, encouraging us to keep reading.

CHAPTER 4: WHERE HAVE ALL THE CRIMINALS GONE?

1966, the Romanian Communist dictator Nicolae Ceauşescu passed a law banning abortions. In part, the ban on abortions was designed to increase the Romanian population. Before this point, Romania had one of the most liberal abortion policies in the world, such that abortion was the single most common form of birth control in the country. At the same time, Ceauşescu banned sex education in schools. Within one year, the birth rate in Romania had doubled. Twenty-three years later, a popular movement (made up largely of students in their late teens and early twenties) rose up against Ceauşescu and had him executed by firing squad. Ironically, many of these young Romanians would never have been born had it not been for Ceauşescu's abortion law.

The history of modern Romania is a good example of how public policy can have completely unexpected consequences. The dictator of Communist Romania had no idea that his abortion reforms would effectively "create" an entire generation of political opponents. The Ceauşescu anecdote will be important to the argument of the chapter, since it reinforces the idea that abortion reform can have a huge impact on a country's demographics.

The history of crime in the United States is like the history of Romanian abortions, told in reverse. Beginning in the 90s, crime fell at a startling rate in American cities. As the authors suggested in the Introduction, one reason for the sudden fall in the crime rate was the legalization of abortion in 1973.

The authors have already discussed the effect of abortion reform on crime in the Introduction to the book (in order to provide a provocative lead-in, probably), but in this chapter they'll study the issue in more depth.

The authors identify eight popular explanations for the falling crime rate of the 1990s: 1) innovative policing strategies, 2) increased reliance on prisons, 3) changes in crack and other drug markets, 4) aging of the population, 5) tougher gun-control laws, 6) a strong economy, 7) more police officers, and 8) all other explanations, including capital punishment, concealed-weapon laws, gun buybacks, etc. In this chapter, they will look at these explanations one-by-one.

Chapter Four consists of a question—why did the crime rates suddenly go down in the U.S. in the 1990s?—and eight potential answers to this question. The authors will use economic analysis—factoring out their own political and moral biases—to determine which explanations do and don't hold water.

The first possible explanation for declining crime rates is the strong economy. A good job market can decrease people's incentives for committing crimes, since there is strong legal alternative to committing the crime (namely, getting a job). However, this rationale only applies to crimes that have a strong economic incentive, such as burglary or robbery. In the 90s, homicide fell at a faster rate than almost any other kind of crime—suggesting that the strengthening economy didn't truly cause the declining crime rates.

If economic growth encouraged people to commit fewer crimes, one would expect that crimes like robbery and embezzlement would decline at the fastest rate. But in fact, murder—a crime that's often committed for non-financial reasons—is what decreased at the fastest rate.

Another possible explanation for declining crime rates is increased reliance on prisons. To analyze this possibility, we might ask ourselves, "Why did the crime rate rise so dramatically in the 70s and 80s?" Beginning in the 1960s, the Supreme Court strengthened the rights of suspected criminals—for instance, after the 1960s, police officers had to inform arrested people of their right to remain silent. As a result of these reforms, conviction rates and incarceration time went down. In short, the incentives for committing crimes went up—thus, the crime rate increased.

During the 1960s, the Supreme Court, presided over by Chief Justice Earl Warren, made a series of rulings that strengthened the rights of suspected criminals. (The concept of "Miranda rights," for instance, comes from a 1966 Supreme Court ruling that requires police officers to inform people of their right to remain silent.) The authors don't editorialize about whether or not these rulings were morally good or bad—they just argue that, insofar as the negative economic incentives for committing crimes decreased, the crime rate went up.

In the two decades following the criminal rights reforms of the 1960s, many government officials and criminologists have tried to decrease incentives to commit crimes with harsher prison terms. There has been a lot of debate over whether or not harsher prison terms can deter crime, however. Some criminologists, for instance, have argued that crime rates tend to be high when imprisonment rates are high—therefore, lowering imprisonment rates could lower the crime rate. This argument, Levitt and Dubner, maintain, wrongly confuses correlation with causation. They compare the argument to a sports fan who notices a *correlation* between a sport team's victory and the team's fans' celebration, and thinks that he can *cause* the sports team to win by instructing the fans to celebrate before each game. So it would seem that—regardless of the moral problems with sending people to jail for long periods of time—increased incarceration rates are *effective* in lowering the crime rate.

The authors maintain that incarceration rates are an important crime deterrent: by threatening potential criminals with years in jail, prisons influence people to commit fewer crimes. The authors ridicule criminologists for suggesting that incarceration rates don't *deter crime, accusing them of confusing causation and correlation. But it's worth noting, for the sake of fairness, that there are many eminent criminologists who have argued that high incarceration rates don't actually deter crime. One of the most persuasive arguments against high incarceration rates is that spending time in jail can push minor criminals into a life of serious crime—once they're in "the system," it's hard to get out.*

Another possible explanation for declining crime rates is increased use of capital punishment. Capital punishment rates in the U.S. increase by a factor of 4 throughout the 1980s. However, supporters of capital punishment miss the point that there are only a small number of capital punishments each year, and nobody who sets out to commit a crime believes that he'll be executed for committing that crime. It's difficult to imagine a criminal being deterred from committing a crime by the thought of capital punishment—such forms of punishment aren't prevalent enough to influence his behavior.

Because relatively few people are executed for crimes, it's unlikely that these rare executions would inspire criminals to stop committing crimes. A criminal who's thinking about committing murder is unlikely to factor the possibility of capital punishment into his or her decision.

Another possible explanation for declining crime rates is the increased numbers of police officers. While the influence of an increased police force on the crime rate is often exaggerated, it's possible to show *some* causation between police force and the crime rate. In the 1980s, the number of police officers per crime decreased by a stunning fifty percent—a mark of both the declining number of police officers and the increasing number of crimes. Police officers per capita increased by about 14 percent in the 1990s. These additional officers provided the manpower to arrest criminals who might have gone unpunished otherwise.

The authors suggest that the growing police force did *help to lower the crime rate in the 1990s. This makes a certain amount of sense—for example, ten police officers would have a much easier time catching ten criminals than one police officer would.*

Another possible explanation for declining crime rates is the use of innovative policing strategies. This was a very popular explanation, particularly in New York City. In the mid 1990s, Rudolph Giuliani, the mayor of New York City, enacted a series of policies designed to fight crime in the city. Giuliani was a proponent of the so-called "broken window theory," the idea that minor crimes like broken windows encourage serious crimes by signaling that law enforcement is weak. Giuliani's policies were widely viewed as successful, but the book's authors maintain that they had little effect on declining crime rates. The crime rate in New York City began declining in 1990. Giuliani didn't become mayor until 1994, at a time when crime had already fallen more than 30 percent. The more significant cause of New York's lowering crime rate was simply the increased *number* of police officers, not innovative policing strategies.

The broken window hypothesis remains one of the most popular explanations for the declining crime rates of the 1990s—for instance, the author Malcolm Gladwell wrote a book called The Tipping Point *in which he argued for the effectiveness of broken window policy. But Levitt and Dubner take a rigorous, mathematical approach to analyzing the effects of Giuliani's policies in New York, and find that broken window policy probably didn't have a large effect on crime—if it did, then why did crime go down thirty percent in the years* before *Giuliani's election?*

Another possible explanation for declining crime rates is tougher gun laws. This is a very controversial issue. Some claim that America is a violent place because there are more guns than there are adults. Others point to countries like Switzerland, which has the highest number of guns per capita of any country on the planet, and which is also one of the safest places in the world.

The authors don't attempt an in-depth analysis of gun control, but they do acknowledge that there are many competing points of view, bolstered with some fairly persuasive examples.

In 1993, Congress passed the Brady Act, which required background checks and a waiting period before customers could own handguns. But the Brady Act probably had little if any effect on gun possession, or the crime rate, since it's so easy to buy a gun on the black market. Other measures, such as gun buybacks, have been shown to be equally ineffective. Most buyback programs exchange guns for 50-100 dollars, a small amount for anyone who actually plans to use a gun. Some have even argued that the solution to the gun violence problem is more guns, not less. One vocal proponent of this idea is John Lott. Lott claims that the government should pass "right-to-carry laws." The authors maintain, "When other scholars have tried to replicate [Lott's] results, they found that right-to-carry laws simply don't bring down crime."

In this section, the authors take a quick look at gun control policies in the United States (a subject that merits a whole book). The authors don't offer any specific conclusions about gun control policy: they remain agnostic about whether gun control policies increase or decrease gun-related crime, as there is little evidence that either liberal or conservative gun policies influence the crime rate. The passage is a good example of how the authors remain even-handed when dealing with controversial issues (although one could argue that this "even-handedness" suggests a willingness to accept the status quo).

Another possible explanation for declining crime rates is the bursting of the crack bubble. Crack cocaine caused a major crime epidemic in the U.S in the 1980s: there were "turf wars," robberies, and various other violent crimes stemming from the control of crack cocaine. Although crack arrests have remained almost the same since the 1980s, crack has become less profitable to sell in this country. With different gangs trying to outsell one another, the average price of crack has been going down for many years. With crack becoming less desirable, the number of violent crimes associated with crack has gone down, too.

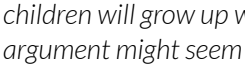
The crack epidemic of the 1980s had a tremendous influence on the crime rate of that decade—as we saw in the previous chapter, dealers were willing to kill to protect their business. But when the economic incentives for selling crack decreased in the 90s, murders and other crimes associated with crack decreased accordingly.

Another possible explanation for declining crime rates is the aging of the population. Overall, young people are more likely to commit crimes than elderly people. As a result, some criminologists have pointed to the increasing average age of American citizens since the 1980s as a cause of the lowering crime rate. The problem with this idea is that even if elderly people are much less likely to commit crimes, the average age in this country has increased far too slowly to explain the sudden, dramatic decrease in crime.

While the notion that an aging population commits fewer crimes is popular, the data simply don't support such a conclusion. A small increase in the average age of the country couldn't trigger such an enormous decrease in the crime rate.

To understand what is perhaps the single most significant cause of the decline in crime in the 1990s, the authors say that we have to look to the abortion rate. After 1973, the Supreme Court mandated that women had the right to abort fetuses in the US. Often, the women who choose to have abortions have excellent, material reasons for doing so: they don't have the money to support a child; they've fallen out with the child's father, etc. After *Roe v. Wade*, the Supreme Court decision that legalized abortions, abortions became relatively cheap and affordable for women of all economic backgrounds. Abortions became most common among negligent, working-class women—women who, statistically speaking, would have been particularly likely to give birth to children who would go on to commit crimes.

The authors have already studied the influence of the abortion rate on the crime rate in the Introduction. Mothers who want to abort their children, but can't, are likely to be negligent parents. They're also likely to be impoverished (especially because they have another child to feed), meaning that there is a strong chance that their children will grow up with an incentive to commit crimes. This argument might seem callous or even prejudicial, since it makes major assumptions about how children will grow up. Nevertheless, the authors maintain that the data supports their conclusions.



In the early 90s, the first cohort of children born after *Roe v. Wade* was reaching its twenties. Had the Supreme Court not legalized abortions, this cohort would have included a significant number of children who would go on to commit crimes. So the crime rate fell through the 1990s likely as a result of an absence of young people who were highly likely to commit crimes.

If parents who try and fail to get abortions are somewhat more likely to raise children who grow up to commit crimes, then it follows that allowing these parents to have abortions will eventually result in a decrease in the crime rate—which is exactly what happened in the '90s.

The abortion theory of crime has met with a lot of criticism, particularly because it seems to identify a correlation, rather than causation, between the abortion rate and the crime rate. One way to study the causational power of the abortion rate, however, is to look at crime rates in states where abortion was legal before 1973, such as New York, California, and Washington. Sure enough, the crime rates began to fall in these states in the late 80s, about two or three years before the national decline in the crime rate.

Like good economists, the authors consider other points of view and potential objections to their arguments. Here, they consider—and partly refute—the criticism that their study measures correlation rather than causation, by showing that abortion rates seemed to influence crime rates on the local as well as the national level.

The idea that abortion could have an effect on the crime rate may be shocking to some people. But regardless of what one thinks of the morality of abortions, the declining crime rate was an unambiguous "unintended benefit" of the Supreme Court's decision.

Having refuted some of the mathematical and scientific objections to their argument, the authors turn to moral objections. But they never claimed that their arguments would be morally palatable—whatever one thinks of abortions, it's hard to argue that the increased abortion rate decreased crime.

Economists have tried to measure the precise impact of abortion on crime by looking at the "relative values" of fetuses and human lives, an exercise that might strike some people as barbaric. Some would say that a fetus has exactly the same "value" as a life—the "ratio" of their values is 1 to 1. Others would say that a fetus is not alive and has no value, meaning that the "ratio" is 0 to 1. There might be other people who say that a fetus has *some* limited value. Such a person might say that a newborn baby is "worth 100 fetuses." For such a person, this would mean that the 1.5. million abortions performed in this country every year are equivalent to the murder of 15,000 human lives. It has been shown that the legalization of abortion rates in this country is responsible for a decrease in the murder rate of far *less* than 15,000 lives per year. So, speaking in strictly economic terms, one could say that the legalization of abortion has been an extremely inefficient way of decreasing the crime rate, if one assumes that fetuses have some limited "life value."

This passage is very precise and mathematical, and also somewhat shocking (perhaps deliberately). The authors try to "test" the idea that abortions fight crime by placing a mathematical value on human life. In the end, the authors conclude that abortions would be a highly inefficient way to fight crime. Once again, Levitt and Dubner never mention morality; instead, they speak in strict, economic terms. Levitt and Dubner's assumptions in this section are fundamentally utilitarian—that is, based on the idea that human life can be measured and valued as a statistic. So perhaps it's not fair to say that Levitt and Dubner are being "barbaric." Instead, they're applying economists' rules to the study of human life—an approach that could be considered useful or morally nonsensical, depending on one's point of view. The authors are also arguably trying to shock readers into taking a more objective approach to the study of the world, or at least to make them keep reading.

CHAPTER 5: WHAT MAKES A PERFECT PARENT?

In the past few decades, parenting has become its own science. There are "parenting experts" who publish books on the proper way to raise a child. Countless sociological and psychological studies are being conducted about the proper way to breast feed, the proper way for children to sleep, the proper way to punish children, etc. Like most so-called experts, parenting experts are good at sounding sure of themselves, even if their information is questionable. And like all experts, parenting experts are adept at inspiring fear in their audiences of parents—the fear of raising bad children.

Parenting experts are good at presenting their opinions as objective truths; indeed, doing so is probably even more important to these experts' success than the study of parenting itself. Experts wield a lot of power over laypeople, because the stakes of raising a child are so high—new parents will listen to a whole range of parenting experts because they want the best for their children.

One reason that parents are so easily convinced by parenting experts is that parents—and, in fact, all human beings—are bad at assessing risk. There are certain risks that scare people into changing their behavior—but these changes in behavior are often out of proportion with the risk itself. For example, one case of mad-cow disease in New Jersey prompted huge numbers of Americans to stop eating beef altogether. On average, people are far more frightened of planes than cars, even though cars are responsible for many more fatalities than planes. If one accounts for likelihood of death in a car versus likelihood of death in a plane, assuming equal time spent in both vehicles, then the overall likelihood of death is about the same.

Fear is an excellent example of how humans can be rational and irrational at the same. It's probably rational to be afraid of mad-cow disease, since such a disease can be deadly. But it also seems fundamentally irrational to be more frightened of mad-cow disease than of heart disease, or more frightened of plane crashes than car crashes. Humans are good at recognizing danger, but they're bad at assessing relative *danger.*

Why are people frightened? One persuasive theory about fear is that people tend to be frightened of things that pose an immediate threat, rather than a far-off danger. For example, Congress is more likely to pass a bill fighting terrorism than a bill fighting heart disease, even though heart disease kills far more people every year than terrorism. Heart disease is a far-off problem; terrorism, according to the authors, is "happening *now*."

Humans tend to be more frightened of immediate threats than slow, gradual dangers (even though slow, gradual dangers are often the most lethal dangers of all). On paper, heart disease is far more dangerous than terrorism (and arguably easier to fight), but humans' "immediacy bias" makes them more likely to fear and act against terrorism.

The authors return to the question of parenting. When parents try to make their children safer, it usually involves buying some new product—a product which won't necessarily protect the child at all. For example, the car seat is often touted as a vital way to protect children in car crashes. In reality, though, the real benefit of putting a child in a car seat is that the child sits in the back seat of the car, rather than riding shotgun; the car seat itself doesn't do much to save the child's life.

The car seat example is a good illustration of how parents allow themselves to be manipulated by experts (and businesses trying to sell more merchandise). It's also a good example of how the real benefits of a product or behavior can be different from the supposed benefits. In other words, it's possible for parents to help their children without understanding exactly why.

Another important aspect of the parenting debate is the question, "how much do parents really matter?" On one hand, it seems clear that bad parenting can play a major role in determining a child's future—this is why, as described previously, unwanted children born to parents who might otherwise have gotten an abortion are more likely to commit crimes as adults. But on the other hand, it's not clear how much good parents can prepare their children for success in adulthood. Numerous studies of twins who were separated at birth suggest that genetics is responsible for about fifty percent of a child's personality and abilities. Further studies suggest that parent nurturing accounts for a surprisingly small amount of a child's development. For example, the Colorado Adoption Project, a study that followed the lives of 245 infants put up for adoption, found no correlation between the personality of the child and the personality of the child's adopted parents. There's still a lot of controversy about the role of parenting in a child's development, with notable proponents on both sides of the debate.

This section introduces the classic dichotomy between nature and nurture. For the purposes of this chapter, "nature" and "genetics" are essentially synonymous. When the authors talk about nature in children, they're essentially talking about the importance of children's DNA. Numerous studies suggest that children grow up in the same way, regardless of their parents or their environments; such a conclusion would imply that genetics / nature plays the primary role in a child's growth. But it also seems clear that nurture plays some role—surely parents have a lot of influence on their children's behavior. This chapter will use economic methods to test the strength of parents' influence on their children.

The authors ask us to consider **two hypothetical children**, one white, the other black. The white child is raised in Chicago by parents who spend a lot of time with him, reading with him and taking him to museums. When the white student proves himself to be good at math, his parents are proud. The black child is born in Florida, and his mother leaves him when he's two years old. His father, who raises him, is an alcoholic, and sometimes beats him. The black child grows up selling drugs. It seems pretty clear that the white child is likely to have a successful life, while the black child is less likely. The question then becomes: to what extent can we attribute the two children's situations to genetics, and to what extent can we attribute their situations to nurture?

The story of the two hypothetical children will show up throughout the second half of the book, including the Epilogue. On paper, the white child has tremendous advantages over the black child: he won't be judged for the color of his skin, he has a good education, and his parents have the money to support him. The question that the authors propose is really twofold: first, to what extent do genetics and nurture influence these children's performance in life, and second, to what extent are their performances unpredictable and not subject to either nature or nurture?

While this chapter will not attempt a comprehensive theory of child rearing, it will try to measure the role of parenting in a child's success. A good place to start is academic performance, often taken as a benchmark of a child's talent, intelligence, and hard work. In the Chicago Public School (CPS) system in the 1980s, it was mandated that any incoming high school freshman could apply to attend any high school in his or her district. This created a chaotic situation in which hundreds of thousands of teenagers were trying to get into the schools that were perceived as being the best in the district, submitting their test results, grades, etc. The only way to be fair was to use a lottery system for the students who applied to schools with more applicants than availabilities. As a result of the lottery system, there were thousands of students with identical test scores and grades sent to different schools. Thus, the CPS affair is a great opportunity to test the causational relationship between high school education and academic success.

The point of the CPS "study" is that children with identical academic abilities received different educations. In other words, children received different forms of "nurture"—some went to academically rigorous high schools, and others went to less successful high schools. This is seemingly an ideal opportunity to measure the influence of education on success—and therefore, the influence of nurture against nature. Right away, however, the study assumes that school tests are capable of measuring a student's ability accurately, so that two students with the same test scores really do have the same ability. This is a somewhat questionable assumption (there are racial biases on many tests, and there are many smart students who don't learn how to be good "test takers" until they're in high school), but for the purposes of this case study we'll assume that it's true.

The CPS data leads to one conclusion: school choice barely matters at all in determining one's academic success. When academically identical students (i.e., students who applied to attend an elite high school and had the same grades and test scores) were sent to different high schools, these students tended to have the same likelihood of graduating their high school and passing their federal-administered tests. Furthermore, students who claimed the right to attend another school in their school district weren't any more likely to graduate or pass their federal tests than academically identical students who didn't claim this right. In other words, a high school education seemed not to provide a measureable academic benefit for students.

The results of the CPS study suggest that a student's education, at least at the high school level, has very little influence on the student's academic success. In other words, a good student at a poor high school will get more or less the same test scores that he or she would have gotten at a good high school. This doesn't necessarily mean that education has no influence on academic ability; as the authors admit, it's possible that elementary and middle school play a major role in students' academic abilities, so that students are unlikely to experience much change in their academic abilities by the time they're teenagers.

However, there was one group of Chicago students who saw a dramatic change in their academic success as a result of the school choice laws: students of technical schools. Students who opted to transfer from traditional high schools to specialized trade schools tended to do better in their new academic environments. But apart from this small subgroup of students, the CPS school choice law seemed to have little to no success in improving students' quality of education.

Like good economists, the authors treat their findings with nuance. It's not all black or white: there were some *students in Chicago who did benefit from changing schools. Trade students—i.e., students preparing for one specific job—would naturally benefit from attending a trade school instead of a typical high school.*

For a long time, studies have shown an income gap between black and white adults. But when one takes into account the differences between the test scores that black and white students achieved when they were in the 8th grad, the income gap virtually disappears. In other words, it would seem, educators can reduce the adult income gap by making sure that black middle school students test at the same level as white middle school students.

The study of the income gap between black and white adults creates some major political problems. Studies would suggest that the best way to make sure that black and white adults are making the same amount of money is to ensure that black and white students get the same education. But as we've just seen, the CPS study seems to suggest that a "good education" doesn't always improve academic performance.

Why is there a "testing gap" between white and black middle school students in the first place? There have been many theories: poverty, genetics, racial bias, etc. Some sociologists, such as the Harvard professor Roland Fryer, have argued that there is an unfortunately strong social incentive for black students to do poorly in school, since a black student who does well academically runs the risk of being mocked by his peers for "being too white" or "selling out."

As we've already seen, social incentives exert a powerful influence on human behavior, and—according to Professor Fryer—in the case of many black students, the social incentive pushes them to reduce their own academic success. This behavior would otherwise seem irrational, except when social incentives are taken into consideration.

In the 1990s, the Department of Education (DoE) undertook a study of childhood development from kindergarten to the fifth grade; this study has proven to have important results for anyone seeking to understand the testing gap between white and black students. The study measured the students' academic performance and compared this data with such other factors as race, family structure, socioeconomic status, etc. In order to understand this monumental study, sociologists and economists have used regression analysis. Regression analysis seeks to isolate the relationship between certain specific factors and other factors: for instance, the relationship between a child's third-grade math scores and the child's parents' level of education. By itself, regression analysis cannot prove causation; it can only show correlation. Interpreting this correlative data, however, sociologists can attempt to prove causation.

The DoE study will take up the remainder of the chapter: it's a monumental, comprehensive study of the different factors that might influence a child's growth. In order to interpret this data, the authors will use mathematical methods. Regression analysis isn't a perfect tool—it can never prove *causation. This suggests that economics is both a "hard," rigorous science and a "soft" discipline that requires a lot of interpretation. To understand the DoE data, the authors will have to use mathematics while also introducing their own subjective interpretations of the data.*

The Department of Education's study from the 1990s yields many important results. First, the black-white testing gap disappears when economists control for factors like income level, parents' educational level, and mother's age at the birth of her first child. (When the authors talk about "controlling" for certain factors, they mean that they eliminate the influence of these other factors. To control for the influence of parents' education on white and black students, economists could focus their attention on students whose parents have identical levels of education.) These results are encouraging because they mathematically refute the racist notion that black students are inherently worse than their white counterparts: on the contrary, they show that black students underperform because of environmental factors—factors than can be improved.

In a sense, regression analysis is a way of performing a scientific "experiment" on data in hindsight. By isolating a few key variables, economists can measure how strongly one of the variables influences the others. The most encouraging conclusion from the DoE data is that the myth of white genetic superiority is just that—a myth. White students don't outperform black students because they're inherently smarter or more talented; they do so because, on average, they're wealthier, healthier, and have stronger family support.

The Department of Education study suggests some ways for the federal government to reduce the black-white testing gap. However, it's also a discouraging study, because it emphasizes the extent of the problem. There is an enormous disparity between the quality of different elementary schools in the U.S., and the quality of one's elementary school education, in contrast to one's high school education, would seem to have a dramatic influence on one's academic success later on.

Comparing the DoE study with the CPS study yields some interesting results. While the quality of one's high school education seems to play relatively little role in academic success, the quality of an elementary school education seems to matter greatly. This would suggest that elementary schools educate students during their most important "formative years."

The Department of Education study isolated sixteen distinct factors that, one might think, play a major role in a child's development. Eight of these sixteen factors have been shown to play a major role in the child's development: 1) The child has highly educated parents; 2) The child's parents have high socioeconomic status; 3) The child's mother is thirty or older at the time of her first child's birth; 4) The child had low birthweight; 5) The child's parents speak English in the home; 6) The child is adopted; 7) The child's parents are involved in the PTA (Parent Teacher Association); and 8) The child has many books in his house. The study also identified eight factors that are, somewhat surprisingly, not correlated with the child's development: 1) The child's family is intact; 2) The child's parents recently moved into a better neighborhood; 3) The child's mother didn't work between birth and kindergarten; 4) The child attended Head Start; 5) The child's parents regularly take him to museums; 6) The child is regularly spanked; 7) The child frequently watches television; and 8) The child's parents read to him nearly every day. The authors will now go through these sixteen factors, two at a time.

For the rest of the chapter, the authors will discuss the different variables that could influence a child's future academic performance (and, by extension, a child's overall quality of life). By discussing a wide range of hypotheses, Levitt and Dubner seek to eliminate their own biases and attempt an objective answer to the question of how a child should and shouldn't be raised. For each hypothesis, the authors will do two things: first, they'll note whether there's a correlation or not; second, if there is a correlation, they'll attempt to explain why. This combination of objective mathematical analysis and subjective interpretation is characteristic of economics.

It matters that the child has educated parents, because families with lots of schooling tend to value education. Also, education correlates with IQ, and IQ is strongly hereditary. However, it doesn't seem to matter greatly if the child's family is intact or not. We've already seen that family structure (number of siblings, whether or not both parents are alive, etc.) seems to have little impact on a child's personality, so perhaps it makes sense that family structure has little impact on academic success, either.

It's not surprising that children with educated parents tend to do well in school. But this isn't necessarily because parents raise their children to be bright; perhaps they simply pass on their high IQs genetically. It's also surprising that family structure doesn't correlate with academic performance—but if the data doesn't show a correlation, the authors will not attempt to argue for one.

It matters if a child's parents have high socioeconomic status, because status correlates strongly with education and IQ, and intelligent parents tend to have intelligent children. However, moving to a better neighborhood doesn't necessarily improve a child's academic success. Nicer houses don't "improve math or reading scores any more than nicer sneakers make you jump higher."

As with IQ, it's not immediately clear what the correlation between status and academic performance means—perhaps class tends to measure intelligence (the sociologist Charles Murray has argued this, somewhat controversially).

It matters if a child's mother was thirty or older at the time of her first child's birth, because women who are older when they have their children are likely to have had some advanced education or had significant career experience; therefore, she'll want her children to have the same academic that she had. However, it doesn't seem to matter if a mother stays home from work until her child is in kindergarten. The authors offer no explanation for this fact; it's just what the Department of Education data suggests.

Again, it would appear that a parent's age correlates with the child's academic success insofar as age correlates with advanced education. The DoE measures many different variables, but many of these variables seem to reflect the same fundamental metric: IQ (which has been found to be a very flawed measure of intelligence). Notice that the authors don't try to explain the lack of correlation between staying at home and academic success: unlike many experts, the authors are realistic enough to admit that, at times, they don't have the answers.

It matters if the child has a low birthweight, perhaps because being born prematurely foreshadows poor parenting (since often, babies are born prematurely because the mother drinks or smokes). However, there seems to be no correlation between academic success and attending Head Start, the federal preschool program. Many of the people who work for Head Start preschools don't have college degrees of any kind, and the job pays poorly. Therefore, Head Start preschool programs are unlikely to attract talented teachers, or correlate with student success in the long run.

We've already seen that poor parenting can have a major influence on a child's development; hence the high correlation of neglectful parents and a child's criminal behavior. So it makes a certain amount of sense that low birthweight correlates with both poor parenting and poor academic performance (overall at least—certainly not in many individual cases).

It matters that the child's parents speak English at home. This isn't surprising, since language ability improves the more one uses the language. However, museum visits don't correlate with academic success at all.

It would be surprising if English usage didn't *correlate with academic success in America, as a child needs to learn how to speak the language to succeed in an English-language school.*

It matters if a child is adopted; indeed, there is a strong *negative* correlation between adoption and school test scores. In part, this might be because on average, mothers who offer up their children for adoption have lower IQs than mothers who keep their children. (The authors acknowledge that this might be a distasteful line of thinking.) However, there's no correlation between spanking a child and its academic success.

Again the authors explain a correlation by tying the data back to IQ. Not for the first time, the authors suggest a hypothesis that might be offensive or disturbing (and certainly, there are intelligent women who have no financial option but to offer their children up for adoption).

It matters if a child's parents are involved in the PTA (Parent Teacher Association). This is probably because the kinds of parents who attend PTA meetings tend to be educated and therefore motivated to help their children succeed. However, there is no proven correlation between TV watching and academic performance. There's a strong bias against television when it comes to academic issues—and yet there are plenty of cases when watching TV can be educational.

PTA attendance would appear to correlate very strongly with education, social status, and perhaps IQ. One of the most surprising results of the DoE study is the lack of correlation between television watching and academic success. There's nothing inherently wicked about watching TV—indeed, TV can even educate children (think of Sesame Street*).*

Finally, it matters that the child has many books in his or her home. However, there is no proven correlation between actually reading to a child every day and the child's academic success. This seems exceptionally strange, since one would imagine that that reason why books correlate with academic success is, at least in part, because reading books makes you smarter. One possible explanation is that families with lots of books in the house tend to be well educated, hard working, and have higher IQs.

The authors save the most puzzling correlations for last. The fact that books correlate with academic performance would suggest that reading the books correlates, too. But surprisingly, the correlation between books and success seems to stem from the parents' intelligence, wealth, and education, not their specific actions (i.e., reading to their children).

The authors return to the list of the sixteen factors that do and don't correlate with academic performance. One important thing to note is that the eight factors that do correlate tend to describe things that parents *are*, (hard-working educated, career-oriented), while the eight factors that don't correlate tend to describe things that parents *do* (read to children, go to museums, use corporal punishment).

The authors don't just analyze correlations one-by-one; they perform a general analysis of the data, studying what the positively correlating variables have in common. The results of their "meta-study" emphasize the importance of essence (arguably, nature) and downplay the importance of action (arguably, nurture).

The authors now return to the nature-nurture debate. The Department of Education study could support the conclusion that parents' genetic makeup makes a far bigger impact on a child's development than any specific things that the parents *do* with their children. An overbearing parent who thinks that he can spank or teach his child into academic success is a little like a foolish politican who thinks he can use money to buy an election—as we already saw, money correlates with electoral success, but it can't really change whether or not people like that politician.

The authors conclude by stressing the role of nature in parenting: a parent's most important contribution to a child may well be the useful genetic traits the parent donates before the child is born. But although the authors question (and even mock) the idea that nurture can influence a child, it's difficult to imagine how their descriptive conclusions would influence parents prescriptively. Regardless of the data, some parents will continue to read to their children, take them to museums, etc., and on an individual level this may have a direct effect.

The Department of Education's study isn't the only study of parental influence on child development. For example, one study analyzed adopted children in the U.S. and Britain. The study found that parents who adopt children tend to be smarter, better educated, and more highly paid than the child's biological parents. While the foster parents' education and money seemed to have little influence on the child's early academic success, the study concluded that adoptees were more likely to attend college and get a well-paying job later in life. So adoptive parents, we might conclude, *do* play an important role in their adopted children's long-term development.

The authors end the chapter with a major caveat. They've just concluded that, for the most part, it would seem that nature plays a larger role in a child's early academic success than nurture does. But without a doubt, nurture influences other aspects of a child's life, such as education, career, etc. Nurture may have little to do with a child's IQ, but even so, it would be wrong to conclude that nurture exerts no influence on a child's overall future. Good parenting is important because it prepares a child for success in many different ways.

CHAPTER 6: PERFECT PARENTING, PART III; OR, WOULD A ROSHANDA BY ANY OTHER NAME SMELL AS SWEET?

Parents want to believe that they make a big difference in the kind of people their children turn out to be. We can see this in the first "official act" a parent performs—naming the child. In recent years, there have been hundreds of books written about the importance of naming one's child. Parents sense that their child's name can somehow "predict" the child's success in life.

The final chapter of the book will study the influence of baby names on a child's life. Is it possible that names can cause *people to lead different lives?*

In 1958, a man named Robert Lane had two children. He named one child Winner, and the other, Loser. Strangely, Loser Lane went on to be a pretty successful man: he went to prep school on a scholarship, and eventually became a detective sergeant for the NYPD. His colleagues call him Lou. Winner Lane, on the other hand, became a career criminal, and has spent most of his adult life behind bars. We might ask—what effect does a child's name have on its development? Does the name really matter?

The chapter begins with an interesting example: two children who altogether failed to "live up to" their names. If a name influences a child's development, one might have expected Winner to succeed and Loser to fail. (It's also possible that Loser was motivated to fight for success because *of his belittling name—a real-life version of the Johnny Cash song, "A Boy Named Sue.")*

To begin studying this issue, we can return to the ideas of Roland Fryer, whom we encountered in the last chapter. Fryer has studied the segregation of black and white culture: black and white people watch different TV, smoke different cigarettes, buy different brands, etc. Fryer wondered: was the distinctive black culture in America a cause or just a reflection of the economic disparity between white and black people? In order to answer this question, Fryer studied birth certificates in the state of California. One interesting point he came across was that black and white families give their children strikingly different kinds of names. Other minorities, such as Asian-Americans and, to a lesser degree, Hispanic-Americans, tend to give their babies names that are somewhat similar to the names for white babies. There is, one could say, a "black-white naming gap." This gap is a recent phenomenon—before the 1970s, there was a great overlap between white and black names. For example, the typical black baby born before 1970 was likely to receive a name that was twice as common among blacks as it was among whites. After 1980, the figure had shot up to *twenty* times as common.

Fryer's research suggests some of the major differences between the African-American community and other American minority communities. The behavior of certain minority communities seems to suggest a desire to integrate with white America—this might explain why, for example, Asian-American families are, on average, likely to give their children common "white names." Like any good economist, Fryer begins his research by analyzing a trend—the increase in distinctively black names in America in the last thirty years. A logical hypothesis to explain this trend is that many black families don't want *to integrate with the norms of white America (which is, perhaps, completely reasonable, considering the history of racism in America at all social and institutional levels).*

Statistically speaking, there are some distinctively black names. For example, of the 454 people named Precious in the 1990s, 431 were black. By contrast, the vast majority of people named Wyatt, Tanner, Claire, and Molly are white. What kinds of mothers are likely to give their children distinctly black names? The statistics indicate that these mothers are usually low-income, unmarried, and uneducated, often still in their teens. Fryer hypothesizes that giving a child a distinctly black name is a sign of solidarity with the black community. Giving a black baby a "white name," such as Emily, Katie, or Amy, could be condemned as a sign of "acting white."

Fryer isn't saying that it's good or bad for black families to want to integrate with white American culture; he's just hypothesizing that the desire to remain separate from white culture and show solidarity with black culture is a reason for the rise of distinctively black names.

In a practical sense, the perceived whiteness or blackness of one's name can make a big difference. In one study, researchers sent identical resumes to different companies, some with the name "DeShawn Williams" (a stereotypically black-sounding name), others with the name "Jake Williams" (a stereotypically white-sounding name). Disturbingly, the "Jake Williams" resumes gleaned significantly more job interviews. But it's not totally clear why "DeShawn Williams" is less likely to get the job interview. It could be because employers are biased against black people. It could also be because "DeShawn" sounds like someone from a low-income, low-education family. Also, the study doesn't say what would happen if "Jake Williams" came to a job interview and turned out to be black—would the employer refuse to hire him after meeting him face-to-face?

This study is another good example of how the authors refrain from rushing to conclusions based on their own political or moral beliefs. While it might seem likely that racism is to blame for the "interview gap" between Jake Williams and DeShawn Williams, Levitt and Dubner conclude that there is insufficient evidence for such a conclusion. Levitt and Dubner aren't denying that such a hypothesis could be true; they simply can't reach such a conclusion based on their current evidence, due to the number of competing hypotheses.

In general, it's very difficult to measure the real-life outcomes of a distinctively black name. One way to do so is to look at people who change their names as adults. People change their names for racial reasons all the time. For decades, Jewish actors in Hollywood dropped their Jewish surnames to sound more "white" (for example, the famous actor Kirk Douglas was born Issur Danielovitch). The question is, would a black man named DeShawn Williams get more job interviews if he changed his name to Connor Williams?

In order to understand the racial biases of names, we would have to study the people who grow up with distinctively black names and then change their names to sound distinctively white. If such people began to experience measurable improvements in their quality of life, there would be evidence that names can cause *differences in one's quality of life, rather than merely reflecting these differences.*

To answer this question, the authors look at the California data that Fryer examined. Data suggests that, on average, women with distinctively black names have a worse "life outcome" (income, educational level, reported happiness, etc.) than women with distinctively white names. However, this difference in life outcome isn't caused by the name itself; for example, if two children named Jake and DeShawn grew up in the neighborhood, they'd be equally likely to have a successful life outcome. Statistically speaking, the name "DeShawn" is not a cause of one's life outcome, but rather a reflection of it: people with the name "DeShawn" are likely to be born in low-income neighborhoods to uneducated parents—factors which, as we saw in the previous chapter, have a major impact on child development.

In the end, the authors suggest that the link between distinctively ethnic-sounding names and life outcome is an example of correlation, not causation. Tragically, minorities often experience a lower quality of life in America, due to hundreds of race- and class-based factors. But distinctively black-sounding names themselves do not seem to cause a lower quality of life overall.

A related question: is there any discernible pattern in the popularity of certain names over time? The authors have found that certain baby names correlate closely with the parents' socioeconomic status. For example, the most common female name in middle-class white households is Sarah, the most common female name for working-class white households is Ashley, and the most common female name for upper-class white households is Alexandra. There are many other ways to correlate names with income level. For example, there are at least ten distinct ways to spell the name "Jasmin," each of which correlates closely with a particular income level. Given the spelling of the name, it would be possible to guess the parents' income level with a fair degree of accuracy.

For the second half of the chapter, the authors study changes in names over time, especially across class lines. There is a very strong correlation between certain names and the parents' socioeconomic status, to the point where even the spelling *of a given name correlates with status.*

When studying trends in baby naming, it's important to keep in mind that names change in popularity very quickly. For example, only one of the ten most common names for white girls, Sarah, appeared on the top ten lists for both 1980 and 2000. One important trend to notice is that names that begin as common upper-class names tend to *become* common working-class names over time. For example, Heather was a common name for upper-class girls thirty years ago; it's now one of the most common names for working-class girls. One reason for this phenomenon is that names can be aspirational: sometimes, people give their babies upper-class sounding names based on the hope that their babies will become successful in life.

There appears to be a "trickle down" effect when it comes to baby names. A name that's initially popular among affluent parents will eventually become popular among working-class parents. Having identified this statistical trend, the authors propose an explanation: working-class parents want their children to be financially successful in life, and think that an affluent-sounding name will inspire or motivate the child to be more financially successful.

The book predicts that in the year 2015, girl names such as Ava, Maya, Sophie, Isabel, and Emma will be very common, along with boy names such as Carter, Jackson, Oliver, Will, and Aidan. The authors make their predictions based on the popularity of these names among upper-class families in the year 2005.

In the ten years since Freakonomics *was published, the authors' predictions appear to have come true—a quick look at the Census Bureau's list of common names suggest that many of the names Levitt and Dubner list have indeed become very popular!*

There are many reasons why parents give their children certain names, and admittedly, not all parents want to give their children "high-end" names. Nevertheless, almost all parents are trying to "signal something" when they give their child a name. In short, the California data suggests that "an overwhelming number of parents use a name to signal *their own expectations* of how successful their children will be." Even if the name itself does not *cause* a child to become successful, it indicates how the parents conceive of success.

Parents give their children certain names in order to send a message about the kind of lives they want their children to live. As Fryer argued, black parents who give their children distinctively black names seem to want their children to grow up with strong ties to the black community. Similarly, working-class parents often give their children affluent-sounding names because they want their children to become affluent adults.

EPILOGUE: TWO PATHS TO HARVARD

By now, it should be clear that *Freakonomics* has had no "unifying theme." The authors have moved back and forth between many different subjects. In the process, they've tried to encourage readers to challenge the conventional wisdom about everything. The more we look at the world, they say, the clearer it becomes that "experts" don't always tell the truth. The authors acknowledge that they have sometimes offered hypotheses that might seem immoral or offensive. But economics isn't about describing the "right thing" or the ideal world; it's about describing how the real world works.

The authors conclude their book by reiterating one of their most important themes: economics and morality have very little in common. An economist's job isn't to offer politically correct, moral-sounding conclusions about the world. Rather, a good economist will entertain many different hypotheses, even if these hypotheses sound offensive or even barbaric. Economists describe the real world as it is, "warts and all," instead of trying to suggest how the world should *be.*

Another important thing to keep in mind about *Freakonomics* is that statistics and economic analysis can never predict how individual people are going to behave with complete accuracy. The authors now return to the **two hypothetical children** they discussed in Chapter Five. One was black, and grew up with an abusive father in Florida. The other was white, and grew up with loving parents who encouraged his math abilities. But in fact, the authors say, these two students weren't hypothetical at all. The black child is Roland Fryer, the Harvard economist. The white child also studied at Harvard. "But soon after, things went badly for him. His name is Ted Kaczynski" (i.e., the Unabomber).

Surprisingly, the two hypothetical children discussed earlier in the book turn out to not be hypothetical at all. The white child, Ted Kaczynski, grew up to be the Unabomber, one of the deadliest terrorists in American history. The fact that a child with almost every advantage in life (at least on paper) could turn out to be a dangerous criminal suggests some of the limitations of economics. Economists can study the data and predict how children will and won't behave on average, but there is always an element of randomness in human behavior. No economist could have predicted the Unabomber. So perhaps we should take Levitt and Dubner's studies of human development with a grain of salt. Economics can tell us a lot about the average *behavior of large groups, but it can't predict how individual human beings will behave.*

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