1 CHAPTER ONE

WHAT DOES IT MEAN TO THINK LIKE A FREAK?

CHAPTER SUMMARY

We are faced with questions everyday: Some are relatively easy to answer while others are complex and seemingly unanswerable. Problems that linger are typically challenging to answer. If they were easy problems, they would already be solved! Regardless of the size and complexity of a problem or task ahead of you, this book offers some advice on how to think!

Let's explore what it means to "think like a Freak." In many ways, thinking like a Freak encourages you to question everything, including things you already "know" to be true and even the very question you are asking. Scores of research studies have demonstrated that conventional wisdom is often wrong: just because people state something emphatically or believe it to be true; doesn't make it true. Similarly, just because two events are temporally related does not mean that one event or behavior caused the other event or behavior; correlation does not equal causality.

Thinking like a Freak involves approaching problems and issues from different angles with different expectations and without preconceptions and predetermined limitations. To do so, we need to rely on data to understand how the world works, learn how incentives impact behavior, understand how resources are allocated, and explore obstacles to those resources.

Sounds easy, right? If it is so easy and simple, why do so few people think like a Freak?

Well, humans are funny that way. Our biases influence our thoughts and behaviors so that we seek out evidence that confirms what we already think is true and discounts information that doesn't.

DISCUSSION QUESTIONS

1. Given what you learned in this chapter, how would you describe what it means to "think Like a Freak"? Do you think like a Freak? Why or why not? Would you encourage others to think like a Freak? Why or why not?
2. If "Thinking Like a Freak" is so easy and simple, why do so few people think like a Freak?
3. Using the soccer example from Chapter 1, if you were taking a penalty kick, explain your strategy for kicking the ball. Does your explanation make sense to someone who is thinking like a Freak? Why or why not?
4. When faced with a problem, do people tend to act to support the greater good or focus more on private benefit? Why?
5. Where do people get their biases and "knowledge"? How do our interactions with family and friends reinforce our biases and "knowledge"?
6. Describe the economic approach. Do you tend to approach problems using this approach? Why or why not?
7. Imagine that you were charged with reducing the use of disposable plastic water bottles that Americans use. How would you use utilize the economic approach to solve this problem?
8. Why is it important to understand the role of specific incentives when trying to solve a problem?
9. People often do not want to challenge others' ideas, even if they have evidence that the ideas are incorrect, because it would be uncomfortable. Americans, more than others, tend to support the notion that people can have their own ideas. Why do you think this is the case?

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ACTIVITIES

1. Take a quick poll of your friends' and family members' position on one of the following current issues: global warming, vaccination, abortion, gun control, prayer in school or car seats. How many have the same "answer" or opinion? Did you observe any trends, consistencies or inconsistencies? Are your opinions similar or different from your family and friends? Did you avoid picking any of these issues because of the strong opinions that your family and friends have on these issues? Why do you think you did this?

2. In psychology and cognitive science, confirmation bias (or confirmatory bias) is a tendency to search for or interpret information in a way that confirms one's preconceptions. Provide an example when you **engaged** in this type of thinking and when you **did not** fall into the "trap" of confirmation bias. Now, think about these two situations, why do you think you fell into the "trap" of confirmation bias in one of the situations and not the other one? What factors influenced your thinking?

2 CHAPTER TWO

THE THREE HARDEST WORDS IN THE ENGLISH LANGUAGE

CHAPTER SUMMARY

"I don't know" are the hardest three words for adults to say. Why does it matter that people have trouble admitting that they don't know something?

If you already know the answer, you won't continue to look for an answer. Until you can admit what you don't yet know, it's nearly impossible to learn what you need to know, which can be a problem!

Our thinking about issues and problems is often influenced by our biases and our "moral compass," the internal thinking about the difference between right and wrong. Our moral compass can overshadow our understanding of the issue or problem at hand by convincing us that the answers are obvious. In a sense, assuming there is a clear distinction between right and wrong can prevent you from learning more about the issue because you think you already know it all!

Thinking like a Freak provides an approach to problem solving that minimizes the influence of biases and moral compasses. Thinking like a Freak involves answering questions, trying out new ideas, being open to feedback, and challenging prevailing orthodoxies partly because it results in more productive and creative answers to seemingly unanswerable questions. It is a little less scary to say "I don't know" if you follow that statement with "but maybe I can find out!"

DISCUSSION QUESTIONS

1. Explain Daniel Patrick Moynihan's famous quote: "Everyone's entitled to their own opinion but not to their own fact." How did you respond to this quote? Did you agree with it? Why or why not?
2. Describe the findings from the global survey research that examined people's thoughts about whether or not the devil really exists. What evidence is presented to support the assertion that political or religious views influence people's beliefs about whether the devil really exists?
3. Why do Levitt and Dubner want you to "put away your moral compass"? How do you think your best friend would react if you encouraged her to put away her moral compass? How would you respond?
4. Explain the "no one left to blame" theory of suicide. What evidence supports this theory and what evidence does not? Have your biases or moral compass influenced your interpretation of the research?
5. Explain how an experiment would have helped the multinational retailer better understand the impact of the investment in US advertising.
6. Why do Levitt and Dubner encourage people to conduct experiments to help solve problems?
7. Provide some examples of issues/problems where a "true" experiment could not be conducted. Be sure to explain the reasons for your answer. If a true experiment couldn't be conducted, how could thinking like a Freak still help?
8. Explain the wine experiment. What made this an experiment? What were the findings?

2

ACTIVITIES

1. Problems that we face today, such as climate change, terrorism, and mass shootings cannot be answered by simply assembling facts; they require judgment, intuition, and an educated guess about how thing will ultimately turn out. Thus, to address complex problems, we need to make educated predictions based on scientifically verified facts. If everyone has access to the same scientifically verified facts, everyone should come up with the same solution, right? Why or why not?

2. To highlight the influence that political views can have on people's opinions, list a couple of your opinions that may be sculpted by your political views. Next, talk with at least two people who have a different political affiliation than you. Are their opinions on those same issues similar to yours or different? Reflect on the role that political affiliation has on yours' and others' opinions? Summarize your experience with these conversations.

3. Given the tendency to want to protect our own reputation, people often perceive that the cost of saying "I don't know" is higher than the cost of being wrong—at least for the individual. Imagine that you are the CEO of a large corporation. Outline a strategy that you would use to counteract this tendency in your business.

3 CHAPTER THREE

WHAT'S YOUR PROBLEM?

CHAPTER SUMMARY

Oftentimes, we are so focused on finding the right answer that we don't stop to think whether we are asking the right question. Taking the time to determine if you should be asking a different question could save time and effort in the long run because if you ask the wrong question, it is likely that you will get the wrong answer!

When thinking about education reform issues, Levitt and Dubner posit that we should reframe the question from "what's wrong with our schools?" to "what other factors related to home environments impact kids' performance in schools?" In solving education reform problems, maybe we are focused too much on schools and the teachers, and too little on parents.

Whatever problem you are trying to solve, make sure that you're not just "trying to solve" the noisy part of the problem. Don't fall victim to the squeaky wheel gets the attention dilemma.

Takeru Kobayashi, better known as Kobi, revolutionized hotdog-eating contests, by redefining the problem he was trying to solve; he approached the "problem" differently. Instead of asking "how can I eat more hotdogs?", he asked "how do I make hot dogs easier to eat?" Rather than focusing on speeding up the process of eating a hotdog and bun in the traditional manner, he broke the hot dog in half and soaked the bun in liquid to reduce how much he would have to chew! Like a true Freak, Kobi continued to experiment with variations, such as wiggling as he ate in order to make more room in his stomach. Using feedback from his experiments, he modified his approach with a different set of solutions.

In addition to redefining the problem he was trying to solve, Kobi questioned the assumed "limits" or "barriers" to the problem—in his case the number of hot dogs a person can eat in 12 minutes. The assumptions that we make based on familiar expectations and past behaviors can limit us. The authors note that "solving a problem can be hard enough, it gets much harder if you've decided beforehand it can't be done!"

DISCUSSION QUESTIONS

1. Explain why reframing the question can help you solve a problem.
2. Do you agree that when we discuss how well American children are doing in school, we should consider the role of parents as well as the role of teachers and schools? Explain your reasoning.
3. Is it always problematic to focus on the "noisy" part of the problem or issue? Describe incidences when it is beneficial and incidences when it is problematic to focus on the noisy part of the problem. Explain the factors that influence the part of the problem that people tend to focus on.
4. Explain how Kobi redefined the problem of competitive hotdog eating. How did redefining the problem help him solve his problem?
5. Describe the strategies that Kobi came up with that resulted from his redefined problem.
6. Describe the role that experimentation played in Kobi's success.
7. Describe the two broad lessons that you learned from Kobi's experience as a world famous hotdog-eating champion. Apply these lessons to a situation that you are currently facing.
8. Roger Bannister was the first human to run a sub-four-minute mile. What did he mean when he said "It is the brain, not the heart or lungs, that is the critical organ"?

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9. Do you think that Levitt and Dubner would encourage people to have the courage to ignore limits? Why or why not?

ACTIVITIES

1. Provide an example from your life, when you focused your attention on the "noisy" part of the problem. How could you reframe the problem/question to facilitate a true resolution to the problem? What factors influenced your decision to focus on that part of the problem?

2. Provide an example from your life, or someone you know, that highlights the role that "assumed limits or barriers" have on behavior. Examples include financial limits, temporal or time limits, expectation limits, social acceptability—what is cool to say or not to say. Explain how these false limits may be impeding your social interactions, success, happiness, etc.

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CHAPTER FOUR

LIKE A BAD DYE JOB, THE TRUTH IS IN THE ROOTS

CHAPTER SUMMARY

Thinking like a Freak means identifying the root cause of a problem, rather than attempting to build solutions that focus on obvious, though often incorrect, "causes." For a variety of reasons, root causes are often not apparent or palatable, thus we often focus on treating the symptoms or behaviors that we think are the cause because they are right there in front of us. In this chapter, the authors take us on a journey back in time and around the world to share examples of non-obvious root causes.

First, through the exploration of numerous theories that have been put forth to explain the rise and fall of violent crime in the United States, we learn that the number of unwanted children may be a primary factor. Second, exploring the role of 16th-century religious decisions in current economies highlights that root causes may go back several generations. Likewise, contemporary patterns of participation in civic and philanthropic programs in several Italian towns may stem from their history as either a free-state or governed overlord state. We also learn that colonial focus on establishing colonies based on land mass and water, without attention to the ethnic distribution of indigenous people, may be a root cause in current patterns of ethnic strife and conflict in Africa. Finally, Roland Fryer, an economist from Harvard, found that a selection mechanism of the slave trade could be the long-lasting root cause of higher rates of heart disease among African Americans.

The two remaining examples in this chapter take us on a journey of the human body. Barry Marshall's method of discovery of the root cause of ulcers was a bit unorthodox; he ingested the suspect bacteria to verify that it was the cause of ulcers and that antibiotics would cure the resulting ulcer. Fortunately, he was correct! Building on the "self as lab rat" method of discovery later led Australian physician Thomas Borody to discover the unlikely power of poop!

DISCUSSION QUESTIONS

1. Explain how thinking like a Freak is "like a bad dye job."
2. Explain why problems are more likely to be resolved when causes, not symptoms, are addressed. Provide an example from your community that highlights a situation when symptoms are being targeted instead addressing root causes.
3. Why would a Freak consider the lack of food and money to be a superficial answer to the question of the causes poverty and famine?
4. What role did the legalization of abortion in the early 1970s play in the rise and fall of violent crime in the United States? Was it the root cause? Explain.
5. What factors did German economist Spenkuch find to account for the Protestant-Catholic income gap in Germany? How do these factors relate to the concept of a Protestant work ethic?
6. What role did the illustration titled "An Englishman Tastes the Sweat of an African" have in economist Fryer's search for the root cause of African-American's higher rate of heart disease?
7. Using Barry Marshall's study of the causes of ulcers, convince your grandmother that stress and spicy food do not cause ulcers.
8. Discuss which characteristics of thinking like a Freak Barry Marshall and Robin Warren engage in as they studied the causes of ulcers.
9. What does the saying "power of poop" mean?

4

ACTIVITIES

1. Think about the current obesity epidemic in the United States, and provide three examples of "solutions" that address the symptoms. Have they been successful? Why or why not? Thinking like a Freak, identify possible root causes of the obesity epidemic.

2. Watch the TED talk focused on obesity by Peter Attia. Applying the lessons learned from this chapter and previous chapter, explain how redefining the problem, ignoring limitations, and searching for the root cause is helping us better understand the obesity crisis.

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CHAPTER FIVE

THINK LIKE A CHILD

CHAPTER SUMMARY

How can problem solvers benefit from thinking like eight-year-olds? Are eight-year-olds smarter than adults? No, but they tend to approach problems differently.

Thinking like a child means asking a lot of questions and generating a lot of ideas—especially outlandish, silly, or obvious ones. Children aren't afraid to come up with wild ideas, and thinking like a Freak means you shouldn't be either! Not every new idea has to be a winner, but if you can sort the good from the bad, you may find yourself with some Freakishly good ideas. Remember, throwing out bad ideas is easy and doesn't cost a thing. Finding a good idea can be priceless.

Thinking like a child means thinking small, not big. This chapter offers four reasons to think small:

1. The small questions haven't all been asked yet (you can be a pioneer!).
2. Working on a small piece of a big problem is easier than taking on a larger, more complicated problem.
3. Small changes arise from thinking small and are more likely to be successful than larger and more difficult changes.
4. Thinking small is more precise and holds lower stakes than thinking big.

Thinking like a child also means having fun. Kids do the things they like to do. When you're doing what you enjoy, it's easier to persist in your efforts to think like a Freak and persevere in your problem solving efforts.

DISCUSSION QUESTIONS

1. Do you think like a child in your own life? Describe examples of situations that required you to think like a child. What were the outcomes?
2. This chapter suggests four reasons to think small. Choose a pressing problem facing you or your community and explain how each of these reasons to think small could help you solve the problem. For example, you might consider thinking small about low graduation rates, food insecurity, or access to health care.
3. Barry Marshall was a "simple" guy whose childhood experiences and ability to continue to think like a child helped solve the mystery of where ulcers come from and how to effectively treat them. How did thinking like a child influence Marshall's view of the human body and contribute to him asking obvious (and important!) questions?
4. "Kids are in love with their own audacity, mesmerized by the world around them, and unstoppable in their pursuit of fun" (p. 96). How does this quote represent the benefits of thinking like a child? How could the ideas expressed in this quote contribute to logging the hours required to become an expert at something?
5. The authors ask, "Why is it so important to have fun?" (p. 96). Thinking like a Freak, what would your answer to this question be?
6. Why is it harder for magicians to fool kids than adults? What about children's thinking that makes them less susceptible to fall for a magic trick?
7. Malala Yousafzai was only seventeen years old when she was awarded the Nobel Peace Prize in 2014 as the youngest recipient in the history of the award. Watch a video or read a transcript of her Nobel Lecture. How does she use (or not use) examples of thinking like a child in her approach to problem solving?

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8. In this chapter, the authors share several examples of small thinking that had big impacts, such as research on drunk walking and stealing at bagel shops. In another example, thinking small resulted in a 25-50% increase in test scores for Chinese students—all for only about $15 per student. Select one of the examples from this chapter and describe how small thinking saved the day and solved the problem.

ACTIVITIES

1. To better think like a Freak, this chapter suggests a three-step process to get started on problem solving: (1) generate a big list of ideas (especially obvious or outrageous ones), (2) follow this step with a cooling off period (sleep on it), and then (3) finally sort the good ideas from bad (remember it costs nothing to ditch a bad idea). It's time to try this strategy in your own life! Choose a pressing issue in your own life, generate a list of ideas, give them a waiting period, and finally, identify the best ideas from your list. Describe your experience with this process and reflect on it.

2. Use thinking like a child and having fun to solve a problem (preferably a small problem!). Identify a problem behavior that you or a person you know would like to change. Think about the "fun" part of the behavior. Describe a strategy to change the problem behavior to a beneficial behavior using a fun approach. Examples from the book include using a lottery to increase savings and a social gaming site to raise money for charity. *Hint:* You might even think back to previous chapters that include discussion of incentives.

6 CHAPTER SIX

LIKE GIVING CANDY TO A BABY

CHAPTER SUMMARY

Would you complete your homework assignments if they didn't have grades? How about working at your job if you weren't being paid?

Are incentives powerful motivators or simply bribes? This chapter contains examples of the effective (and ineffective) use of incentives—from M&M's to fines for hit-and-run accidents—in an attempt to answer this question.

Thinking like a Freak entails effectively using incentives to change behavior. Again, sounds simple, right? Unfortunately, finding the right incentive, in the right amount, at the right time, under the right circumstances can be challenging.

Adding to the challenge, people's preferences for incentives are not always clear. In many circumstances people say one thing but do another. Being able to observe people's behavior and determine the incentives that *really* motivate their behavior can help you in many situations. For example, understanding the *true* incentives for behavior change helped researchers reduce energy consumption in California and theft in Arizona as well as increase charitable donations.

This chapter offers three reasons why incentive-based plans can fail. Thinking like a Freak means understanding the limits of incentives and the distances some individuals may be willing to go to get around your incentivized plans.

Finally, changing the frame of a relationship can be a powerful tool in changing behavior, too. Examples of changing relationship frames range from the surprising successes of a ping pong team as an agent of international diplomacy and the unlikely rise of Zappos to become a leader in the online marketplace.

DISCUSSION QUESTIONS

1. The title of this chapter, "Like Giving Candy to a Baby," hints at an experience one of the authors had with incentives used to change behavior. How can incentives be effective changing behavior? Do incentives always produce the desired behavior? Why or why not?
2. Effectively using incentives means understanding what they are. List examples of financial, social, moral, legal or other kinds of incentives and describe how they might work in one setting and backfire in another.
3. In this chapter, Levitt and Dubner explore the relationship between cheap food and obesity. Using this example, propose how incentives could be manipulated to attempt to ameliorate the obesity epidemic in the US.
4. Many educators and economists disagree about providing cash incentives for children to perform well in school. Explain perspectives for and against the use of pay for grades.
5. This chapter introduces the concepts of *declared preferences* and *revealed preferences*. Explain the difference between these and offer examples of these two types of preferences that you have observed in your own experience.
6. Summarize the differences between the declared and revealed preferences of participants in the study of incentives for energy conservation in California, or the study of petrified wood theft from a national park in Arizona, or the once-and-done donor recruitment strategy of Smile Train.
7. Using examples from your own life, describe two or more relationship frames that influence your behavior.

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8. What are three reasons why even carefully constructed incentive plans can fail? Describe an example of a real or fictional incentive plan failure due to these reasons.

ACTIVITIES

1. Think about a problem you are currently facing at home, work or school. *Hint:* Recall from the previous chapter that there are benefits to focusing on a small problem. How could incentives help you to solve this problem? Create an incentive plan for changing a behavior to help solve your problem by addressing the six rules of incentives on page 135.

2. Remember the pay for grades example from page 109? Imagine that wealthy philanthropists have read this book and want to pay students a substantial amount of money for high grades. This should universally work to improve student success, right? Are you skeptical? You should be. Consider the perspective of a sneaky student with ambiguous morals. How might he/she view this opportunity? What are some potential ways that the philanthropists' good incentive intentions could backfire? After identifying the potential problems with the strategy, suggest some adjustments that could make it more effective.

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CHAPTER SEVEN

WHAT DO KING SOLOMON AND DAVID LEE ROTH HAVE IN COMMON?

CHAPTER SUMMARY

What could the two men in the title of this chapter *possibly* have in common? Dubner and Levitt pose a few possible answers to this question. (Here's a hint: Both men provide clever examples of thinking like a Freak.)

While you'll have to read the chapter for details on similarities between King Solomon and David Lee Roth, it's safe to say that both men used aspects of game theory to detect dishonesty and determine when individuals were telling the truth (and when they were not). Knowing who was lying helped each man make important decisions that had significant impact on their careers and reputations. Dubner and Levitt have dubbed this form of lie-detection *Teaching Your Garden to Weed Itself.*

Designing a self-weeding garden sounds like a difficult task! Fortunately chapter 7 includes lots of examples to help you get started planting your own. For example, Peter Leeson studies Hungarian church records from the 13th century in which priests were asked to determine when those accused of crimes were innocent or guilty. Tony Hsieh, CEO of Zappos.com, has devised a self-weeding scheme to reduce turnover in his company, and cold beer was used to prevent the discovery of a secret bullet factory in Israel after World War II. Finally, Nigerian letter fraud scammers and the authors of this book use a version of the self-weeding garden to entice specific groups of people to reveal themselves (gullible individuals for the former and would-be terrorists for the latter).

DISCUSSION QUESTIONS

1. What is *game theory?*
2. How do the stories of King Solomon and David Lee Roth illustrate examples of game theory? How did the successful use of game theory affect the reputation of both King Solomon and David Lee Roth?
3. In this chapter, the authors mention a *pooling equilibrium* and a *separating equilibrium*. What are these? Provide an example for each type of equilibrium.
4. What does it mean to "teach your garden to weed itself?"
5. How does the story of Adam and Ralf illustrate the principle of teaching your garden to weed itself?
6. Why are most college applications relatively complicated and difficult to complete? What does the information obtained from a completed application signal to a college admissions committee?
7. This chapter includes a description of trial by ordeal that was used in determining the guilt or innocence of the accused in 308 cases from 13th-century Hungary. Surprisingly the majority of those on trial (130 individuals) were unharmed and exonerated. First, explain why most people were not harmed during the trials. Next, explain how this represents an example of a self-weeding garden.
8. Imagine that you have just heard about a former Zappos.com employee who has taken $2000 in cash rather than continue to work for the company. What does this reveal about the former employee? Does this action hurt or help the company? Explain your responses to these questions.
9. Explain the "warm-beer alarm" used by the kibbutz dwellers described in this chapter.
10. Using your new skills in thinking like a Freak, suggest an answer to this question from page 156: "If the Nigerian scam is so famous, why would a Nigerian scammer ever admit he is from Nigeria?"

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11. Explain how purchasing life insurance from a British bank in 2009 may have been a factor involved in generating a list of names identifying would-be terrorists. How did Dubner and Levitt use a self-weeding garden to help the UK refine algorithms used to enhance national security?

ACTIVITIES

1. Levitt and Dubner suggest that the self-weeding garden strategy is more successful if it is used infrequently. Describe one possible scenario where this strategy could be useful in your own life. Don't forget to describe what the possible outcomes of the strategy could be. It's okay to speculate here! Why do you think that this strategy is difficult to use frequently?

2. Why do most animal rescue and adoption organizations recommend charging a "rehoming" fee for adopting an animal? Wouldn't it seem that with more pets than available homes, these groups would want to *give away* as many animals as possible? What is the advantage of charging a fee? How is this an example of a self-weeding garden? After thinking about rehoming fees, suggest a rehoming fee strategy for your favorite animal adoption organization. Consider what the fee (or even the application process) should be and describe your recommendations in a memo to the leader of the organization.

8 CHAPTER EIGHT

HOW TO PERSUADE PEOPLE WHO DON'T WANT TO BE PERSUADED

CHAPTER SUMMARY

By now, you may have noticed that thinking like a Freak may occasionally get you into hot water with people who disagree with your approach. This chapter provides a framework for persuading your reluctant friends, colleagues, and family if you find yourself in this predicament. The authors offer six basic principles for effective persuasion:

1. **First, understand how hard persuasion will be—and why.**
   In this section, Dubner and Levitt offer examples of how strongly people cling to their positions or an issue, even in the face of evidence to the contrary. What's a Freak to do if they want to convince someone who doesn't want to be convinced? It helps to recognize that an opponent's position is probably based on ideology and herd mentality, not fact and logic.

2. **Remember, it's not me; it's you.**
   Keep in mind that no matter how well you construct an argument, create a campaign or sell your angle, the only thing that matters is how your recipient responds.

3. **Don't pretend your argument is perfect.**
   There is no such thing as a perfect argument. All arguments have shortcomings. You'll maximize your persuasive efficiency (and effectiveness) by acknowledging and addressing potential flaws rather than trying to hide them.

4. **Acknowledge the strengths of your opponent's argument.**
   By recognizing the strengths of an opposing argument, you may be able to learn from it and strengthen your *own* position.

5. **Keep the insults to yourself.**
   Insulting an opponent can undermine even the strongest persuasive attempts. You will likely make an enemy, rather than an ally, which will make it even more difficult to change the person's opinion.

6. **Tell stories.**
   Stories put persuasive data into a meaningful context and demonstrate the value and consequences of data and arguments.

In addition, another important theme of this chapter is that we are often blind to our own blindness. Recognizing this phenomenon and trying to see what's been missing is a big step on the way to thinking like a Freak.

DISCUSSION QUESTIONS

1. From the example of the Cultural Cognition Project's investigation into opinions about climate change, summarize the relationship between scientific literacy and numeracy and beliefs about climate change. Were you surprised by what they found? How do the results of the study contribute to thinking like a Freak?

2. In the example of driverless cars, why might supporters of driverless cars be wise to point out the potential problems with this form of transportation? Why is pointing out potential flaws a good persuasion tactic?

3. If almost 500 children are killed in traffic accidents *every day,* why are so many people unaware of traffic deaths? In contrast, why are so many people aware of the far fewer deaths due to air travel?

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4. In the study of German schoolteachers, explain why this group was more likely to take early retirement.
5. Why do the authors advise a would-be persuader to steer clear of anecdotes? What is the problem with anecdotes?
6. What is the flaw in the story of too many people eating too much fatty food in the obesity epidemic?
7. Explain how *The Encyclopedia of Ethical Failure* illustrates the usefulness of story telling to persuade people to behave ethically and follow rules.

ACTIVITIES

1. If you could persuade one person (or a group) of just one thing to make your life better today, who would it be and of what would you persuade them? Using the six principles from this chapter, outline a plan for persuasion.
2. Watch *The Danger of a Single Story* in which Chimamanda Ngozi Adichie demonstrates several examples of persuasion. What is she trying to persuade her audience of? (*Hint:* She offers multiple examples. Select one example of persuasion or several.) Evaluate her performance by applying the six principles of this chapter. Did she use each of the principles? If not, which did she omit? Which did she use effectively? What did you learn about persuasion from *The Danger of a Single Story?*

9 CHAPTER NINE

THE UPSIDE OF QUITTING

CHAPTER SUMMARY

Quitters never win—or do they? This chapter explores the benefits of quitting. The authors begin by pointing out three forces that often prevent us from quitting: the belief that quitting is a sign of failure, focusing on sunk costs, and ignoring *opportunity costs*. Thinking like a Freak involves considering each of these three factors and reconsidering quitting as a winning strategy.

This chapter includes several positive examples of quitting, from accurately predicting the late grand opening of a flagship store to setting aside a breakthrough in sterilization until the required technology becomes available. It also includes examples of the negative consequences of *not* quitting in some circumstances, such as the Challenger explosion.

Quitting can have physical and mental health benefits. Research by Carsten Wrosch found that quitters are *healthier* than their persistent counterparts when faced with unattainable goals. This claim is partially supported by data collected on the Freakonomics Experiments site where participants allowed their decisions to be made by a virtual coin flip. Based on data from the site, breaking up with a partner and quitting a job resulted in making people *happier* even when the decision was made at random.

As the authors wrap up their advice for thinking like a Freak in this final chapter, they suggest that "quitting is at the very core of thinking like a Freak." They return to an unlikely, but key player in their quest to encourage you to think like a Freak: the great quitter Winston Churchill. While history tends to remember Churchill's perseverance against unlikely odds, Freaks will come to understand the important role quitting played in his decisions.

DISCUSSION QUESTIONS

1. This chapter opens with an inspiring quote from Winston Churchill. If you are thinking like a Freak, why might this quote *not* be very inspiring?
2. What are the differences between *sunk* and *opportunity costs?* Which should you pay more attention to if you are considering quitting?
3. In the story of Intellectual Ventures, what are the two forces at work for every innovation and why did the team celebrate the failure of the self-sterilizing surface?
4. What is "go fever"? Why can it be dangerous?
5. What is a "premortem"? How can it be used to make better-informed decisions about quitting?
6. The authors describe themselves as happy, serial quitters. What did they quit and why did it make them happy?
7. What is the *status-quo bias* and how does it affect decisions to quit?
8. Why do the authors recommend using the phrase "letting go" instead of "quitting"? How might this small change contribute to thinking like a Freak?
9. Is flipping a coin the opposite of thinking like a Freak? Why or why not? Explain.
10. Winston Churchill is famous for the advice he gave to the Harrow schoolboys about never quitting. Did he follow his own advice? Explain.

9

ACTIVITIES

1. Have you ever witnessed an example of "go fever" in your own life? (If not, you can speculate or create a plausible fictional example.) Describe the example. Then consider what factors contributed to the appearance of go fever. What were the consequences of go fever in this instance? Were they positive, negative or neutral?

2. Identify a decision that is currently facing you in your life. For example, starting, stopping or changing an academic program, or beginning, ending or changing a personal relationship. Conduct a premortem on the situation and identify what *might* go wrong before the decision is made. Describe the results of your premortem and reflect on the usefulness of this process in making your decision.