

## David and Goliath

Malcolm Gladwell—2013

### INTRODUCTION

- He doesn't appreciate that power can come in other forms as well—in breaking rules, in substituting speed and surprise for strength. Saul is not alone in making this mistake. In the pages that follow, I'm going to argue that we continue to make that error today, in ways that have consequences for everything from how we educate our children to how we fight crime and disorder.
- He looks and sounds like someone suffering from what is called acromegaly—a disease caused by a benign tumor of the pituitary gland. The tumor causes an overproduction of human growth hormone, which would explain Goliath's extraordinary size. (The tallest person in history, Robert Wadlow, suffered from acromegaly. At his death, he was eight foot eleven inches, and apparently still growing.)
- What the Israelites saw, from high on the ridge, was an intimidating giant. In reality, the very thing that gave the giant his size was also the source of his greatest weakness

### Part One: The Advantages of disadvantages and the disadvantages of advantages

#### CHAPTER ONE: Vivek Ranadive

- When Vivek Ranadive decided to coach his daughter Ajani's basketball team, he settled on two principles. The first was that he would never raise his voice. This was National Junior Basketball—the Little League of basketball. The team was made up mostly of twelve-year-olds, and twelve year-olds, he knew from experience, did not respond well to shouting. He would conduct business on the basketball court, he decided, the same way he conducted business at his software firm.
- He grew up with cricket and soccer. He would never forget the first time he saw a basketball game. He thought it was mindless. Team A would score and then immediately retreat to its own end of the court. Team B would pass the ball in from the sidelines and dribble it into Team A's end, where Team A was patiently waiting. Then the process would reverse itself.
- They worked on science project and read long and complicated books and dreamed about growing up to be marine biologists. Ranadive knew that if they played the conventional way—if they let their opponents dribble the ball up the court without opposition—they would almost certainly lose to the girls for whom basketball was a passion. Ranadive had come to America as a seventeen-year-old with fifty dollars in his pocket. He was not one to accept losing easily. His second principle, then, was that his team would play a real full-court press—every game, all the time. The team ended up at the national championships. "It was really random," Anjali Ranadive said. "I mean, my father had never played basketball before."
- Suppose you were to total up all the wars over the past two hundred years that occurred between very large and very small countries. Let's say that one side has to be at least ten times larger in population and armed might than the other. How often do you think the bigger side wins? Most of us, I think, would put that number at close to 100 percent. A tenfold difference is a lot. But the actual answer may surprise you. When the political scientist Ivan Arreguin-Toft did the

calculation a few years ago, what he came up with was 71.5 percent. Just under a third of the time, the weaker country wins.

- The answer: in those cases, the weaker party's winning percentage climbs from 28.5 percent to 63.6 percent. To put that in perspective, the United States' population is ten times the size of Canada's. If the two countries went to war and Canada chose to fight unconventionally, history would suggest that you ought to put your money on Canada.
- For some reason, this is a very difficult lesson for us to learn. We have, I think, a very rigid and limited definition of what an advantage is. We think of things as helpful that actually aren't and think of other things as unhelpful that in reality leave us stronger and wiser.
- Redwood City's strategy was built around the two deadlines that all basketball teams must meet in order to advance the ball. The first is the time allotted for the inbounds pass. When one team scores, a player from the other team takes the ball out-of-bounds and has five seconds to pass it to a teammate on the court. If that deadline is missed, the ball goes to the other team. Usually that's not an issue, because teams don't hang around to defend against the inbounds pass. They run back to their own end. Redwood City did not do that. Each girl on the team closely shadowed her counterpart. When some teams play the press, the defender plays behind the offensive player she's guarding in order to impede her once she catches the ball. The Redwood City girls, by contrast, played a more aggressive, high-risk strategy. They positioned themselves in front of their opponents to prevent them from catching the inbounds pass in the first place. And they didn't have anyone guard the player throwing the ball in. Why bother? Ranadive used that extra player as a floater who could serve as a second defender against the other team's best player.

## **CHAPTER TWO Teresa DeBrito**

- To this day, 77 percent of Americans think that it makes more sense to use taxpayer money to lower class sizes than to raise teachers' salaries. Do you know how few things 77 percent of Americans agree on?
- If you look at all the studies of class size—and there have been hundreds done over the years. Fifteen percent find statistically significant evidence that students do better in smaller classes. Roughly the same number find that students do worse in smaller classes. Twenty percent are like Hoxby's and find no effect at all—and the balance find a little bit of evidence in either direction that isn't strong enough to draw any real conclusions. The typical class-size study concluded with a paragraph like this:
- Over that same period, per-pupil spending in the United States soared 21 percent—with nearly all of those many tens of billions of new dollars spent on hiring those extra teachers. It's safe to say that there isn't a single profession in the world that has increased its numbers over the past two decades by as much or as quickly or at such expense as teaching has. One country after another has spent that kind of money because we look at a school like Shepaug Valley—where every teacher has a chance to get to know every student—and we think, "There's the place to send my child." But the evidence suggests that the thing we are convinced is such a big advantage might not be such an advantage at all."
- His family lived in what people euphemistically called a "mixed neighborhood." He went to public schools and wore hand-me-downs. His father was a product of the Depression, and talked plainly about money. The man from Hollywood said that if he wanted something—a new pair of

running shoes, say, or a bicycle—his father would tell him he had to pay half. If he left the lights on, his father would show him the electric bill. “He’d say, Took, this is what we pay for electricity. You’re just being lazy, not turning the lights off. We’re paying for you being lazy.

- **He was sitting** in his home office as he said that—a room easily the size of most people’s houses—and then he finally came to the point. He had children that he loved very dearly. Like any parent, he wanted to provide for them, to give them more than he had. But he had created a giant contradiction, and he knew it. He was successful because he had learned the long and hard way about the value of money and the meaning of work and the joy and fulfillment that come from making your own way in the world. But because of his success, it would be difficult for his children to learn those same lessons. Children of multimillionaires in Hollywood do not rake the leaves of their neighbors in Beverly Hills. Their fathers do not wave the electricity bill angrily at them if they leave the lights on. They do not sit in a basketball arena behind a pillar and wonder what it would be like to sit courtside. They live courtside.
- “My own instinct is that it’s much harder than anybody believes to bring up kids in a wealthy environment,” he said. “People are ruined by challenged economic lives. But they’re ruined by wealth as well because they lose their ambition and they lose their pride and they lose their sense of self-worth. It’s difficult at both ends of the spectrum. There’s some place in the middle which probably works best of all.”
- The man from Hollywood is not the first person to have had this revelation. It is something, I think, that most of us understand intuitively. There is an important principle that guides our thinking about the relationship between parenting and money—and that principle is that more is not always better.
- The scholars who research happiness suggest that more money stops making people happier at a family income of around seventy-five thousand dollars a year. After that, what economists call “diminishing marginal returns” sets in? If your family makes seventy-five thousand and your neighbor makes a hundred thousand, that extra twenty-five thousand a year means that your neighbor can drive a nicer car and go out to eat slightly more often.
- That’s why so many cultures around the world of money? That’s why so many cultures around the world have a proverb to describe the difficulty of raising children in an atmosphere of wealth. In English, the saying is “Shirtsleeves to shirtsleeves in three generations.”
- (He who doesn’t have it, does it, and he who has it, misuses it”). Wealth contains the seeds of its own destruction.
- The parents have to learn to switch from ‘No we can’t’ to No we won’t.’
- Sometimes, as a parent, you have to say it only once or twice. It doesn’t take long for the child of a middle-class family to realize that it is pointless to ask for a pony, because a pony simply can’t happen.
- “No we won’t” get a pony requires a conversation, and the honesty and skill to explain that what is possible is not always what is right. “I’ll walk wealthy parents through the scenario, and they have no idea what to say,” Grubman said. “I have to teach them: yes, I can buy that for you. But I choose not to. It’s not consistent with our values.” But then that, of course, requires that you have a set of values, and know how to articulate them.
- The economist Jesse Levin has done some fascinating work along these same lines, looking at Dutch school children. He counted how many peers children had in their class—that is, students at a similar level of academic performance, particularly for Struggling students.” In other words,

if you are a student—particularly a poor student—what you need is to have people around you asking the same questions, wrestling with the same issues, and worrying about the same things as you are, so that you feel a little less isolated and a little more normal.

### CHAPTER THREE Caroline Sacks

- Did they want to be a Little Fish in the Big Pond of the Salon or a Bier Fish in a Little Pond of their own choosing?
- In the end, the Impressionists made the right choice, which is one of the reasons that their paintings hang in every major art museum in the world. But this same dilemma comes up again and again in our own lives, and often we don't choose so wisely
- We strive for the best and attach great importance to getting into the finest institutions we can. But rarely do we stop and consider—as the Impressionists did—whether the most prestigious of institutions is always in our best interest. There are many examples of this, but few more telling than the way we think about where to attend university.
- Their challenge was “to advance without worrying about opinion.” He was right. Off by themselves, the Impressionists found a new identity. They felt a new creative freedom, and before long, the outside world began to sit up and take notice. In the history of modern art, there has never been a more important or more famous exhibition. If you tried to buy the paintings in that warren of ton-floor rooms today. It would cost von more than a billion dollars.
- Caroline Sacks was experiencing what is called “relative deprivation.”
- **Stouffer**'s point is that we form our impressions not globally, by placing ourselves in the broadest possible context, but locally—by comparing ourselves to people “in the same boat as ourselves.” Our sense of how deprived relative.
- The phenomenon of relative deprivation applied to education I is called—appropriately enough—the “Big Fish—Little Pond Effect.” The more elite an educational institution is, the worse students feel about their own academic abilities. Students who would be at the top of their class at a good school can easily fall to the bottom of a really good school. Students who would feel that they have mastered a subject at a good school can have the feeling that they are falling farther and farther behind in a really good school. And that feeling—as subjective and ridiculous and irrational as it may be—matters. How you feel about your abilities—your academic “self-concept”—in the context of your classroom shapes your willingness to tackle challenges and finish difficult tasks. It's a crucial element in your motivation and confidence.
- The Big Fish-Little Pond theory was pioneered by the psychologist Herbert Marsh, and to Marsh, most parents and students makes their school choices for the wrong reasons. “A lot of people think that going to an academically selective school is going to be good,” he said. “That's just not true.
- What happened to Caroline Sacks is all too common. More than half of all American students who start out in science, Technology, and math programs (or STEM, as they are known) drop out after their first or second year. Even though a science degree is just about the most valuable asset a young person can have in the modern economy, large numbers of would-be STEM majors end up switching into the arts, where academic standards are less demanding and the coursework less competitive. That's the major reason that there is such a shortage of qualified American-educated scientists and engineers in the United States.

STEM majors	Top Third	Middle Third	Bottom Third
Math SAT	569	472	407

If we take the SAT as a guide, there's a pretty big difference in raw math ability between the best and the poorest students at Hartwick.

Now let's look at the portion of all science degrees at Hartwick that are earned by each of those three groups.

STEM degrees	Top Third	Middle Third	Bottom Third
Percent	55.0	27.1	17.8

The students in the top third at Hartwick earn well over half of the school's science degrees. The bottom third end up earning only 17.8 percent of Hartwick's science degrees. The students who come into Hartwick with the poorest levels of math ability are dropping out of math and science in droves. This much seems like common sense. Learning the advanced mathematics and physics necessary to

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- The Harvard Dregs are Little Fish in a very Big and Scary Pond. The Hartwick All-Stars are Big Fish in a Very Welcoming Small Pond. What matters, in determining the likelihood of getting a science degree, is not just how smart you are. It's how smart you feel relative to the other people in your classroom.
- **Are you better** off hiring a Big Fish from a Tiny, Tiny Pond than even a Middle-sized Fish from a Big Pond? Absolutely.
- The answer, of course, is neither. No one is failing anyone. It's just that the very thing that makes elite schools such wonderful places for those at the top makes them very difficult places for everyone else.
- By the way, do you know what elite institution has recognized this very fact about the dangers of the Big Pond for nearly fifty years? Harvard! In the 1960s, Fred Glimp took over as director of

admissions and instituted what was known as the “happy-bottom-quarter” policy. In one of his first memos after taking office, he wrote: “Any class, no matter how able, will always have a bottom quarter. What are the effects of the psychology of feeling average? Even in a very able group? Are there identifiable types with the psychological or what-not tolerance to be ‘happy’ or to make the most of education while in the bottom quarter?”

- He knew exactly how demoralizing the Big Pond was to everyone but the best. To Glimp’s mind, his job was to find students who were tough enough and had enough achievements outside the classroom to be able to survive the stress of being Very Small Fish in Harvard’s Very Large Pond. Thus did Harvard begin the practice (which continues to this day) of letting in substantial numbers of gifted athletes who have academic qualifications well below the rest of their classmates. If someone is going to be cannon fodder in the classroom, the theory goes, it’s probably best if that person has an alternative avenue of fulfillment on the football field.
- No sane person would say that the solution to her problems would be for her to go to an even more competitive school like Stanford or MIT. Yet when it comes to affirmative action. That’s exactly what we do. We take promising students like Caroline Sacks—but who happen to be black—and offer to bump them up a notch. And why do we do that? Because we think we’re helping them.

## **Part Two: The theory of desirable difficulty**

### **CHAPTER FOUR David Boies**

- That’s the wrong half of the brain, for a precise and rigorous task like reading. Sometimes when a dyslexic reads, every step will be delayed, as if the different parts of the brain responsible for reading were communicating via a weak connection. One of the ways to test for the presence of dyslexia in a small child is to have him engage in “rapid automatized naming.” Show him one color after another—a red dot, then a green dot. Then A blue dot, then a yellow dot—and check his response. See the color. Recognize the color Attach a name to the color. Say the name. That’s automatic in most of us. It’s not in someone with a reading disorder; somewhere along the way, the links between those four steps start to break down. Ask a four-year-old: Can you say the word “banana” without the “huh”, Or say: listen to the following three sounds: cuh, ah, and tuh. Can you combine them into “cat”? Or take “cat,” “hat,” and “dark.” Which one of those words doesn’t rhyme? Easy questions for most four-year-olds. Really hard questions for dyslexics. Many people used to think that what defines dyslexics is that they get words backwards —“cat” would be “tac,” or something like that—making it sound like dyslexia is a problem in the way the words are seen. But it is much more profound than that
- “Usually you get a diagnosis at eight or nine,” she went on. “And we find that by that point, there are already a lot of serious psychological implications, because by that time, you’ve been struggling for three years.
- 1. A bat and a ball cost \$1.10 in total. The bat costs \$1.00 more than the ball. How much does the ball cost? What’s your instinctive response? I’m guessing that it is that the ball must cost 10 cents. That can’t be right, though, can it? The bat is supposed to cost \$1.00 more than the ball. So

if the ball costs 10 cents, the bat must cost \$1.10, and we've exceeded our total. The right answer must be that the ball costs 5 cents.

- **Here's another** question: 2. If it takes 5 machines 5 minutes to make 5 widgets, how long would it take 100 machines to make 100 widgets?
  - The setup of the question tempts you to answer 100. But it's a trick. One hundred machines take exactly the same amount of time to make 100 widgets as 5 machines take to make 5 widgets. The right answer is 5 minutes.
- These puzzles are two of the three questions that make up the world's shortest intelligence test." It's called the Yale professor Shane Frederick, and it measures your ability to understand when something is more complex than it appears—to move past impulsive answers to deeper, analytic judgments.
- The CRT is really hard. But here's the strange thing. Do you know the easiest way to raise people's scores on the test? Make it just a little bit harder. The psychologists Adam Alter and Daniel Oppenheimer tried this a few years ago with a group of undergraduates at Princeton University. First they gave the CRT the normal way, and the students averaged 1.9 correct answers out of three. That's pretty good, though it is well short of the 2.18 that MIT students. Then Alter and Oppenheimer printed out the test questions in a font that was really hard to read—a 10 percent gray, 10-point italics Myriad Pro font—so that it looked like this:
  - *A bat and a ball cost \$1.10 in total. The bat costs \$1.00 more than the ball. How much does the ball cost?*
- The average score this time around? 2.45. Suddenly, the students were doing much better than their counterparts at MIT.
- That's strange, isn't it? Normally we think that we are better at solving problems when they are presented clearly and simply. But here the opposite happened. A 10 percent gray, 10-point italics Myriad Pro font makes reading really frustrating. You have to squint a little bit and maybe read the sentence twice, and you probably wonder halfway through who on earth thought it was a good idea to print out the test this way. Suddenly you have to work to read the question.
- Yet all that extra effort pays off. As Alter says, making the questions "disfluent" causes people to "think more deeply about whatever they come across. They'll use more resources on it. They'll process more deeply or think more carefully about what's going on. If they had to overcome a hurdle, they'll overcome it better when you force them to think a little harder." Alter and Oppenheimer made the CRT more difficult. But that difficulty turned out to be desirable.
- There are two possible interpretations for this fact. One is that this remarkable group of people triumphed in spite of their disability: they are so smart and so creative that nothing—not even a lifetime of struggling with reading—could stop them. The second, more intriguing, possibility is that they succeeded, in part, because of their disorder—that they primed something in their struggle that proved to be of enormous advantage. Would you wish dyslexia on your child? If the second of these possibilities is true, you just might.
- "If I could read a lot faster, it would make a lot of things that I do easier." Boies said. "There's no doubt about that. But on the other hand, not being able to read a lot and learning by listening and asking questions means that I need to simplify issues to their basics. And that is very powerful, because in trial cases, judges and jurors—neither of them have the time or the ability to become an expert in the subject. One of my strengths is presenting a case that they can understand." His opponents tend to be scholarly types. Who have read every conceivable analysis of the issue at hand? Time and again, they get bogged down in excessive detail. Boies doesn't.

- “One of the things you tell a witness when you’re preparing them is take your time,” Boies said. “Even when you don’t need to. Because there will be some times when you need to slow down, and you don’t want to show the examiner by your change of pace that this is something that you need time on. So—when were you born?” He spoke carefully and deliberately. “It...was... 1941.” You don’t say, ‘ItwasMarcheleventh1941atsix-thirtyinthemorning’ even though you’re not trying to hide it. You want your response to be the same for the easy things as for the harder things so that you don’t reveal what’s easy and what’s hard by the way you answer.” When Blankenhorn paused just a bit too much in certain crucial moments, Boies caught it. “It was tone and pace and the words he used. Some of it comes from pauses.
- Neuroticism
  - (sensitive/nervous versus secure/confident)
- Extraversion
  - (energetic/gregarious versus solitary/reserved)
- Openness
  - (inventive/curious versus consistent/cautious)
- Conscientiousness
  - (orderly/industrious versus easygoing/careless)
- Agreeableness
  - (cooperative/empathic versus self-interested/antagonistic)
- The psychologist Jordan Peterson argues that innovators and revolutionaries tend to have a very particular mix of these traits—particularly the last three: openness, conscientiousness, and agreeableness.
- Innovators have to be open. They have to be able to imagine things that others cannot and to be willing to challenge their own preconceptions. They also need to be conscientious. An innovator who has brilliant ideas but lacks the discipline and persistence to carry them out is merely a dreamer. That, too, is obvious.
- But crucially, innovators need to be disagreeable. By disagreeable, I don’t mean obnoxious or unpleasant. I mean that on that fifth dimension of the Big Five personality inventory, “agreeableness,” they tend to be on the far end of the continuum. They are people willing to take social risks—to do things that others might disapprove of.
- “My upbringing allowed me to be comfortable with failure,” he said. “The one trait in a lot of dyslexic people I know is that by the time we got out of college, our ability to deal with failure was very highly developed. And so we look at most situations and see much more of the Upside than the downside. Because we’re so accustomed to the downside. It doesn’t faze us. I’ve thought about it many times. I really have, because it defined who I am. I wouldn’t be where I am today without my dyslexia. I never would have taken that first chance.”

## CHAPTER FIVE: Emil “Jay” Freireich

- In the early 1960s, a psychologist named Marvin Eisenstaedt started a project interviewing “creative’s”—innovators and artists and entrepreneurs—looking for patterns and trends. As he was analyzing the responses, he noticed an odd fact. A surprising number had lost a parent in childhood. The group he was studying was so small that Eisenstadt knew there was a possibility that what he was seeing was just chance. But the fact nagged at him. What if it wasn’t chance?

What if it meant something? There had been hints in the psychological literature. In the 1950s, while studying a sample of famous biologists, the science historian Anne Roe had remarked in passing on how many had at least one parent who died while they were young. The same observation was made a few years later in an informal survey of famous poets and writers like Keats, Wordsworth, Coleridge, Swift, Edward Gibbon, and Thackeray. More than half, it turned out, had lost a father or mother before the age of fifteen. The link between career achievement and childhood bereavement was one of those stray facts that no one knew what to do with. So Eisenstadt decided to embark on a more ambitious project.

- “It took me ten years,” Eisenstadt says. “I was reading all kinds of foreign-language books, I went to California and to the Library of Congress, and to the genealogical library in New York City. I tracked down as many parental-loss profiles as I could, until I felt I had good statistical results.”
- Of the 573 eminent people for whom Eisenstadt could find reliable biographical information, a quarter had lost at least one parent before the age of ten. By age fifteen, 34.5 percent had had at least one parent die, and by the age of twenty, 45 percent. Even for the years before the twentieth century, when life expectancy due to illness and accidents and warfare was much lower than it is today, those are astonishing numbers.
- One of the reasons, he concludes, is that they have “inherited an excessive amount of psychological health.” Those who fall short, he says, are children “too conventional, too obedient, too unimaginative, to make the big time with some revolutionary idea.”
- He goes on: “Gifted children and child prodigies seem most likely to emerge in highly supportive family conditions. In contrast, geniuses have a perverse tendency of growing up in more adverse conditions.”
- He saw the [sausage] and said to Jay, you’re insane.’ He told Jay he was going to fire him if he kept doing platelet transfusions.” Freireich ignored him. “Jay being Jay,” DeVita went on, “he decided if he couldn’t do it, he didn’t want to work there anyway.” The bleeding stopped.
- Then German bombs dropped like hail for months and months, and millions of remote misses who had predicted that they would be terrified of bombing came to understand that their fears were overblown. They were fine. And what happened then? The conquering of fear produces exhilaration. And: The contrast between the previous apprehension and the present relief and feeling of security promotes a self-confidence that is the very father and mother of courage.
- **Courage is not** something that you already have that makes you brave when the tough times start. Courage is what you earn when you’ve been through the tough times and you discover they aren’t so tough after all. Do you see the catastrophic error that the Germans made? They bombed London because they thought that the trauma associated with the Blitz would destroy the courage of the British people. In fact, it did the opposite. It created a city of remote misses, who were more courageous than they had ever been before. The Germans would have been better off not bombing London at all.
- The Klan was trying to do to Shuttlesworth what the Nazis had been trying to do to the English during the Blitz. But they, too, misunderstood the difference between a near and a remote miss. In Diane McWhorter’s magnificent history of the civil rights campaign in Birmingham, Carry Me Home, she describes what happened as the police and neighbors came running toward the smoking ruins of Shuttlesworth’s house. It was late at night. Shuttlesworth had been lying in House, it was late at night. Shuttlesworth had been lying in bed. They feared he was dead:

- A voice rose from the wreckage: “I’m not coming out naked.” And, after a few moments, Shuttlesworth emerged in the raincoat someone threw into the parsonage’s rubble. He was not crippled, not bloodied or blind; he was not even deaf, though the blast had blown windows out of houses a mile away... Shuttlesworth raised a biblical hand to the concerned neighbors, and said, “The Lord has protected me. I am not injured.”...
- A big cop was crying. “Reverend, I know these people,” he said of the bombers. “I didn’t think they would go this far. If I were you, I’d get out of town. These people are vicious.”
- “Well, Officer, you’re not me,” Shuttlesworth said. “Go back and tell your Klan brothers that if the Lord saved me from this, I’m here for the duration. The fight is just beginning.”
- That’s a classic remote miss. Shuttlesworth wasn’t killed. (A direct hit.) He wasn’t maimed or badly injured. (A near miss.) He was unscathed. Whatever the Klan had hoped to accomplish had gone badly awry. Shuttlesworth was now less afraid than he had been before.
- We are all of us not merely liable to fear, we are also prone to be afraid of being afraid, and the conquering of fear produces exhilaration.... The contrast between the previous apprehension and the present relief and feeling of security promotes a self-confidence that is the very father and mother of courage.
- But Frei and Freireich and a companion group at the Roswell Park Memorial Institute in Buffalo led by James Holland became convinced that the medical orthodoxy had it backwards. If the drugs weren’t killing enough cancer cells, didn’t that mean that the children needed more aggressive treatment, not less? Why not combine 6-MP and methotrexate? They each attacked cancer cells in different ways. They were like the army and the navy. Maybe the cells that survived 6-MP would be killed by methotrexate. And what if they added prednisone into the mix? It could be the air force, bomb from the air while the other drugs attacked from the land and sea.
- Then Freireich stumbled across a fourth drug, one derived from the periwinkle plant. It was called vincristine. Someone from the drug company EH Lilly brought it by the National Cancer Institute for researchers to study. No one knew much about it, but Freireich had a hunch that it might work against leukemia. “I had twenty-five kids dying,” he said. “I had nothing to offer them. My feeling was, I’ll try it. Why not? They’re going to die anyway.” Vincristine showed promise. Freireich and Frei tried it out on children who no longer responded to the other drugs, and several went into temporary remission. So Frei and Freireich went to the NCI’s research oversight board to ask for permission to test all four drugs together: army, navy, air force, marines.
- In 1965, Freireich and Frei published “Progress and Perspectives in the Chemotherapy of Acute Leukemia” in *Advances in Chemotherapy*, announcing that they had developed a successful treatment for childhood leukemia. Today, the cure rate for this form of cancer is more than 90 percent. The number of children whose lives have been saved by the efforts of Freireich and Frei and the researchers who followed in their footsteps is in the many, many thousands.
- “We used to do bone marrows by grabbing their legs like this,” Freireich told me. He held one of his giant hands out, as if wrapped around a child’s tiny femur. “We’d stick the needle in without anesthesia. Why no anesthesia? Because they’d scream just as much when you gave them an anesthesia shot. It’s an eighteen- or nineteen-gauge needle straight into the shinbone, right below

the knee. The kids are hysterical. The parents and nurses hold the kid down. We did that for every cycle. We needed to know if their bone marrow had recovered.”

- When he said the words “grabbing their legs like this,” an involuntary grimace passed across Freireich’s face, as if for a moment he could feel what an eighteen-gauge needle straight into the shinbone of a small child felt like, and as if the feeling of that pain would give him pause. But then, as quickly as it appeared, it was gone.

## CHAPTER SIX: Wyatt Walker

- **Upon arriving in** Birmingham, King called a meeting of his planning team. “I have to tell you,” he said, “that in my judgment, some of the people sitting here today will not come back alive from this campaign.” Then he went around the room and gave everyone a mock eulogy. One of King’s aides would later admit that he never wanted to go to Birmingham at all: “When I kissed my wife and children good-bye down on Carol Road in Atlanta, I didn’t think I would ever see them again.”
- The lesson of the trickster tales is the third desirable difficulty: the unexpected freedom that comes from having nothing to lose. The trickster gets to break the rules.
- They would form out on the side; and it would look like a thousand folks. We weren’t marching but twelve, fourteen, sixteen, and eighteen. But the papers were reporting fourteen hundred.” It was a situation straight out of one of the most famous of all trickster tales—the story of Terrapin, a lowly turtle who finds himself in a race with Deer. He hides just by the finish line and places his relatives up and down the course. At strategic intervals, to make it seem like he is running the finish line and places his relatives up and down the course, at Strategic intervals, to make it seem like he is running the whole race. Then at the finish line, he emerges just ahead of Deer to claim victory.
- “They can only see...through white eyes,” Walker explained, gleefully. “They cannot distinguish even between Negro demonstrators and Negro spectators. All they know is Negroes” Connor was an arrogant man who liked to swagger around Birmingham saying, “Down here we make our law.”
- Connor stood watch as the children came closer. “Do not cross,” he said. “If you come any further, we will turn the fire hoses on you.” Connor’s jails were full. He couldn’t arrest anyone else, because he had nowhere to put them. The children kept coming. The firemen were hesitant.
- Back at the church. Walker began deploying waves of children to the other end of the park to open another front. Connor had no more fire trucks. But he was determined that none of the marchers cross over into “white” Birmingham. “Bring the dogs,” Connor ordered, calling in eight K-9 units. “Why did you bring old Tiger out?” Connor shouted at one of his police officers. “Why didn’t you bring a meaner dog—this one is not the vicious one!” The children came closer. A German shepherd lunged at a boy. He leaned in, arms limp, as if to say, “Take me, here I am.” On Saturday, the picture ran on the front page of every newspaper around the country.
- Does Wyatt Walker’s behavior make you uncomfortable? James Forman, who was a key figure in the civil rights movement in those years, was with Walker when Connor first deployed the K-9 units. Forman says that Walker started jumping with joy. “We’ve got a movement. We’ve got a movement”

- Whether or not any of the parents were buying this is unclear. King plunged on: “Your daughters and sons are in jail....Don’t worry about them....They are suffering for what they believe, and they are suffering to make this nation a better nation.” Don’t worry about them Taylor Branch writes that there were rumors—“true and false”—about “rats, beatings, concrete beds, overflowing latrines, jailhouse assaults, and crude examinations for venereal disease.” Seventy-five and eighty children were packed into cells intended for eight. Some had been bused out to the state fairground and held without food and water in stockades in the pouring rain. King’s response? “Jail helps von to rise above the miasma of everyday life,” he said blithely. “If they want some books, we will get them. I catch up on my reading every time I go to jail.”
- **He was eventually** fired, but only after he had stretched his three-month term to a year and sold two ideas to NBC for five thousand dollars each. Grazer and Cohn—two outsiders with learning disabilities—played a trick. They bluffed their way into professions that would have been closed to them. The man in the cab assumed that no one would be so audacious as to say he knew how to trade options if he didn’t. And it never occurred to the people Brian Grazer called that when he said he was Brian Grazer from Warner Brothers, what he meant was that he was Brian Grazer who pushed the mail cart around at Warner Brothers. What they did is not “right,” just as it is not “right” to send children up against police dogs. But we need to remember that our definition of what is right is, as often as not, simply the way that people in positions of privilege close the door on those the outside. David has nothing to lose, and because he has nothing to lose.



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- Now look at the faces of the black bystanders in the background, they couldn’t be surprised or horrified? They’re not. Next, look at the leash in Middleton’s hand. It’s taut, as if he’s trying to restrain Leo. And look at Gadsden’s left hand. He’s gripping Middleton on the forearm. Look at Gadsden’s left leg. He’s kicking Leo, isn’t he? Gadsden would say later that he had been raised around dogs and had been taught how to protect himself. “I automatically threw my knee up in front of the dog’s head,” he said. Gadsden wasn’t the martyr, passively leaning forward as if to say, “Take me, here I am.” He’s steadying himself, with a hand on Middleton, so he can deliver a sharper blow. The word around the movement, afterward, was that he’d broken Leo’s jaw. Hudson’s photograph is not at all what the world thought it was. It was a little bit of Brer Rabbit trickery.

## Part Three: The Limits of Power

### CHAPTER SEVEN Rosemary Lawlor

- “It has been said that most revolutions are not caused by revolutionaries in the first place, but by the stupidity and brutality of governments,” Sean MacStiofain,
- Disobedience can also be a response to authority. If the teacher doesn’t do her job properly, then the child will become disobedient.
- “But one of the things we find is that this sort of thing is more often an engagement problem than a behavioral problem. If the teacher is actually doing something interesting, these kids are quite capable of being engaged. Instead of responding in a let me control your behavior’ way, the teacher needs to think, “How can I do something interesting that will prevent you from misbehaving in the first place?””
- **When people** in authority want the rest of us to behave, it matters—first and foremost—how they behave.
- First of all, the people who are asked to obey authority have to feel like they have a voice—that if they sneak up. They will be heard. Second, the law has to be predictable. There has to be a reasonable expectation that the rules tomorrow are going to be roughly the same as the rules today. And third, the authority has to be fair. It can’t treat one group differently from another.
- She then put together a task force of police officers and had them contact every name on the list. “We said to them, you’re in the program,” Jaffe explained. “And the program is that we’re going to give you a choice. We want to do everything we can to get you back in school, to your family, find out what’s needed in the household. We will provide job opportunities, educational opportunities, medical—everything we can. We want to work with you. But the criminal conduct has to stop. And if it doesn’t stop and you get arrested for anything, we’re going to do everything to keep you in jail. I don’t care how minor it is. We are going to be all over you.”” The program was called d J-RIP, for Juvenile Robbery Intervention Program. There was nothing complicated about it—at least on the surface. J-RIP was standard-issue, high intensity modern policing. Jaffe put her J-RIP task force in a trailer in the parking lot of a housing project, not off in a station house somewhere. She made every surveillance tool available to her J-RIP team. They made lists of each J-RIPper’s associates—the people they had been arrested with.
- This sounds like something out of a bad Hollywood movie, doesn’t it? Turkeys on Thanksgiving! Hugging and crying! The reason most police departments around the world haven’t followed Jaffe’s lead is that what she did doesn’t seem right. Johnnie Jones was a bad kid. Buying food and toys for people like him seems like the worst form of liberal indulgence. If the police chief in your town announced, in the face of a major crime wave, that she was going to start hugging and feeding the families of the criminals roaming the streets, you’d be speechless—right? Well, take a look at what happened in Brownsville.
- What Jaffe proved was that the powerful have to worry about how others think of them—that those who give orders are acutely vulnerable to the opinions of those whom they are ordering about.

### CHAPTER EIGHT Wilma Derksen

- The criminologist Franklin Zimring called it “the largest penal experiment in American history.” There were eighty thousand people behind bars in California’s prisons in 1989. Within ten years, that number would double—and along the way, the crime rate in California came tumbling down. Between 1994 and 1998, the homicide rate in California dropped 41.4 percent, rape dropped 10.9 percent, robbery dropped by 38.7 percent, assault dropped by 22.1. percent, burglary dropped by 29.9 percent, and auto theft dropped by 36.6 percent
- “If more than two percent of the neighborhood goes to prison, the effect on crime starts to reverse”
- What Freeland did not understand, however, was the same thing that Reynolds did not understand: there comes a point where the best-intentioned application of power and authority begins to backfire. Searching the first house in the Lower Falls made sense.

## **CHAPTER NINE Andre Trocme**