clenched. But MacCurdy's idea about near and remote misses suggests something quite different—that courage is imposing and intimidating presence that it is easy to imagin some sense acquired. ine him emerging from his mother's womb, fists already Where did Freireich's courage come from? He's such an

experience of being in the London Blitz: Take a look again at what MacCurdy wrote about the

confidence that is the very father and mother of courage. the present relief and feeling of security promotes a selfsafe, the contrast between the previous apprehension and hibited to others nothing but a calm exterior and we are now panic in an air-raid, and, when it has happened, we have exduces exhilaration.... When we have been afraid that we may to be afraid of being afraid, and the conquering of fear pro-We are all of us not merely liable to fear, we are also prone

doners assumed the experience would be terrifying. What Because no one in England had been bombed before, Lonable to fear, we are also prone to be afraid of being afraid. Let us start with the first line: We are all of us not merely lidropped like hail for months and months, and millions of feel once the bombing started. Then German bombs frightened them was their prediction about how they would

> father and mother of courage. feeling of security promotes a self-confidence that is the very between the previous apprehension and the present relief and conquering of fear produces exhilaration. And: The contrast overblown. They were fine. And what happened then? The rified of bombing came to understand that their fears were remote misses who had predicted that they would be ter-

had ever been before. The Germans would have been betof remote misses, who were more courageous than they British people. In fact, it did the opposite. It created a city sociated with the Blitz would destroy the courage of the bombed London because they thought that the trauma assee the catastrophic error that the Germans made? They and you discover they aren't so tough after all. Do you what you earn when you've been through the tough times makes you brave when the tough times start. Courage is ter off not bombing London at all. Courage is not something that you already have that

touching on now, though, because it is a perfect example of this idea of acquired courage. There is one part of the Birmingham story that is worth American civil rights movement, when Martin Luther King Jr. brought his campaign to Birmingham, Alabama. The next chapter of David and Goliath is about the

was a black Baptist preacher named Fred Shuttlesworth, who had been leading the fight against racial segregation in One of King's most important allies in Birmingham

called "affective forecasting," and all of the evidence suggests that we are terrible affective forecasters. The psychologist Stanley J. Rachman, for example, has done things like \*The prediction we make about how we are going to feel in some future situation is

is that the actual experience of the thing that was feared is a lot less scary than the group of claustrophobics and have them stand in a small metal closet. What he finds person imagined take a group of people terrified of snakes and then show them a snake. Or take a

the city for years. On Christmas morning in 1956, Shuttlesworth announced that he was going to ride the city's segregated buses in defiance of the city's laws forbidding blacks from traveling with whites. The day before the protest, on Christmas night, his house was bombed by members of the Ku Klux Klan. 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 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.

The next morning, members of his congregation pleaded with him to call off the protest. He refused. McWhorter continues:

"Hell, yeah, we're going to ride," the cussing preacher said and addressed his board. "Find you any kind of crack you can to hide in if you're scared, but I'm walking downtown after this meeting and getting on the bus. I'm not going to look back to see who's following me." His voice deepened into the preacher register. "Boys step back," he ordered, "and men step forward."

A few months later, Shuttlesworth decided to personally take his daughter to enroll at the all-white John Herbert Phillips High School. As he drove up, a crowd of angry white men gathered around his car. Here is McWhorter again:

To the child's disbelief, her father stepped out of the car. The men lunged at Shuttlesworth, baring brass knuckles, wooden clubs, and chains. Scampering west across the sidewalk, he was repeatedly knocked down. Someone had pulled his coat up over his head so that he couldn't lower his arms.... "We've got this son of a bitch now," a man yelled. "Let's kill him," the crowd screamed. From a white female cheering section came advice to "kill the motherfucking nigger and it will be all over." Men began smashing the windows of the car.

So, what happened to Shuttlesworth? Not much. He managed to crawl back into the car. He went to the hospital and was found to have minor kidney damage and some scratches and bruises. He checked himself out that afternoon, and that evening from the pulpit of his church, he told his congregation that he had only forgiveness for his attackers.

Shuttlesworth must have been someone of great resolve and strength. But when he climbed unscathed out of the wreckage of his house, he added an extra layer of psychological armor. 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.

And then what happened at Phillips High School? Another remote miss! Upon leaving the hospital, Shuttlesworth told reporters, "Today is the second time within a year that a miracle has spared my life." If one remote miss brings exhilaration, we can only imagine what two bring.

Not long afterward, Shuttlesworth brought a colleague, Jim Farmer, to meet with Martin Luther King at a church in Montgomery, Alabama. Outside, an angry mob had gathered, waving Confederate flags. They began to rock the car. The driver reversed and tried an alternate route, only to be blocked once more. What did Shuttlesworth do? Just like at Phillips High School, he got out of the car. Here again is McWhorter:

Coke bottles shattered car windows around him as he paused to register a strange smell, his first whiff of tear

gas. Then he beckoned Farmer out of the car and strode into the mob. Farmer followed, "scared as hell," trying to shrink his bon vivant's ample body into Shuttlesworth's thin shadow. The goons parted, their clubs went slack, and Shuttlesworth walked up to the doors of First Baptist without a thread on his jacket disturbed. "Out of the way." was all he had said. "Go on. Out of the way."

## That's three remote misses.

Losing a parent is not like having your house bombed or being set upon by a crazed mob. It's worse. It's not over in one terrible moment, and the injuries do not heal as quickly as a bruise or a wound. But what happens to children whose worst fear is realized—and then they discover that they are still standing? Couldn't they also gain what Shuttlesworth and the Blitz remote misses gained—a self-confidence that is the very father and mother of courage?\*

<sup>\*&</sup>quot;I had a patient like this many years ago," the New York psychiatrist Peter Mezan the frame of the known world—what's believed, what's assumed, what's common pathology in childhood and the larger-than-life successes that some of those bepeople wouldn't take. I think he felt that there was nothing to lose." To Mezan, there there was nothing except to overcome. So he was willing to take chances that other was a gangster, and he and his sibling were sent to an orphanage. He grew up where died in front of him when he was six, with his father standing over her, screaming at told me. "He'd built an empire. But talk about a catastrophic childhood. His mother them. It was shattered." ability to step outside it, because I think the usual frame of childhood didn't exist for the laws of physics," he said. "They are not confined to the frame. They have the sense, what's familiar, what everyone takes for granted, whether it's about cancer or survived such trauma had a liberating effect. "These are people who are able to break reaved children would have later in adulthood. The fact of having endured and was no mystery—in his experience over the years—between this kind of outsize her in rage. She was having a convulsion. The father was then murdered because he

"The officer who took Shuttlesworth to jail," McWhorter writes of another of Shuttlesworth's many run-ins with white authority, "struck him, kicked him in the shin, called him a monkey, and then goaded him, 'Why don't you hit me?' Shuttlesworth replied, 'Because I love you.' He folded his arms and smiled the rest of the way to jail, where, forbidden to sing or pray, he took a nap."

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The work that Freireich had done in stopping the bleeding was a breakthrough. It meant that children could now be kept alive long enough that the underlying cause of their illness could be treated. But leukemia was an even harder problem. Only a handful of drugs were known to be of any use at all against the disease. There were the cell-killing drugs 6-MP and methotrexate, and there was the steroid prednisone. But each was potentially severely toxic and could be given in limited doses only, and because it could be given in limited doses only, it could wipe out only some of a child's cancer cells. The patient would get better for a week or so. Then the cells that had survived would start to multiply, and the cancer would come roaring back.

"One of the consultants at the clinical center was a man named Max Wintrobe," Freireich said. "He was world-famous because he wrote the first textbook of hematology, and he had written a review of the current state of the treatment of leukemia in children. I have a quotation from him that I show my students to this day. It says, 'These drugs cause more harm than good because they just pro-

long the agony. The patients all die anyway. The drugs make them worse, so you shouldn't use them.' This was the world's authority."

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, bombing 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 Eli 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.

Cancer is now routinely treated with drug "cocktails," complicated combinations of two or three or even four