At the heart of ancient Palestine is the region known as the Shephelah, a series of ridges and valleys connecting the Judaean Mountains to the east with the wide, flat expanse of the Mediterranean plain.

It is an area of breathtaking beauty, home to vineyards and wheat fields and forests of sycamore and terebinth. It is also of great strategic importance. Over the centuries, numerous battles have been fought for control of the region because the valleys rising from the Mediterranean plain offer those on the coast a clear path to the cities of Hebron, Bethlehem, and Jerusalem in the Judaean highlands.

The most important valley is Aijalon, in the north. But the most storied is the Elah. The Elah was where Saladin faced off against the Knights of the Crusades in the twelfth century. It played a central role in the Maccabean wars with Syria more than a thousand years before that, and, most famously, during the days of the Old Testament, it was where the fledgling Kingdom of Israel squared off against the armies of the Philistines.

The Philistines were from Crete. They were a seafaring people who had moved to Palestine and settled along the coast. The Israelites were clustered in the mountains, under the leadership of King Saul. In the second half of the eleventh century BCE, the Philistines began moving east, winding their way upstream along the floor of the Elah Valley.

Their goal was to capture the mountain ridge near Bethlehem and split Saul’s kingdom in two. The Philistines were battle-tested and dangerous, and the sworn enemies of the Israelites. Alarmed, Saul gathered his men and hastened down from the mountains to confront them. The Philistines set up camp along the southern ridge of the Elah. The Israelites pitched their tents on the other side, along the northern ridge, which left the two armies looking across the ravine at each other.

Neither dared to move. To attack meant descending down the hill and then making a suicidal climb up the enemy’s ridge on the other side. Finally, the Philistines had enough. They sent their greatest warrior down into the valley to resolve the deadlock one on one.

He was a giant, six foot nine at least, wearing a bronze helmet and full body armor. He carried a javelin, a spear, and a sword. An attendant preceded him, carrying a large shield. The giant faced the Israelites and shouted out: “Choose you a man and let him come down to me! If he prevail in battle
against me and strike me down, we shall be slaves to you. But if I prevail and strike him down, you will be slaves to us and serve us.”

In the Israelite camp, no one moved. Who could win against such a terrifying opponent? Then, a shepherd boy who had come down from Bethlehem to bring food to his brothers stepped forward and volunteered. Saul objected: “You cannot go against this Philistine to do battle with him, for you are a lad and he is a man of war from his youth.” But the shepherd was adamant. He had faced more ferocious opponents than this, he argued. “When the lion or the bear would come and carry off a sheep from the herd,” he told Saul, “I would go after him and strike him down and rescue it from his clutches.”

Saul had no other options. He relented, and the shepherd boy ran down the hill toward the giant standing in the valley.

“Come to me, that I may give your flesh to the birds of the heavens and the beasts of the field,” the giant cried out when he saw his opponent approach. Thus began one of history’s most famous battles. The giant’s name was Goliath. The shepherd boy’s name was David.

When Goliath shouted out to the Israelites, he was asking for what was known as “single combat.” This was a common practice in the ancient world. Two sides in a conflict would seek to avoid the heavy bloodshed of open battle by choosing one warrior to represent each in a duel. For example, the first-century BCE Roman historian Quintus Claudius Quadrigarius tells of an epic battle in which a Gaul warrior began mocking his Roman opponents. “This immediately aroused the great indignation of one Titus Manlius, a youth of the highest birth,” Quadrigarius writes. Titus challenged the Gaul to a duel: He stepped forward, and would not suffer Roman valour to be shamefully tarnished by a Gaul.

Armed with a legionary’s shield and a Spanish sword, he confronted the Gaul. Their fight took place on the very bridge [over the Anio River] in the presence of both armies, amid great apprehension. Thus they confronted each other: the Gaul, according to his method of fighting, with shield advanced and awaiting an attack; Manlius, relying on courage rather than skill, struck shield against shield and threw the Gaul off balance.

While the Gaul was trying to regain the same position, Manlius again struck shield against shield and again forced the man to change his ground. In this fashion he slipped under the Gaul’s sword and stabbed him in the chest with his Spanish blade…. After he had slain him, Manlius cut off the Gaul’s head, tore off his tongue and put it, covered as it was with blood, around his own neck.

This is what Goliath was expecting—a warrior like himself to come forward for hand-to-hand combat. It never occurred to him that the battle would be fought on anything other than those terms,
and he prepared accordingly. To protect himself against blows to the body, he wore an elaborate tunic made up of hundreds of overlapping bronze fishlike scales. It covered his arms and reached to his knees and probably weighed more than a hundred pounds. He had bronze shin guards protecting his legs, with attached bronze plates covering his feet. He wore a heavy metal helmet. He had three separate weapons, all optimized for close combat. He held a thrusting javelin made entirely of bronze, which was capable of penetrating a shield or even armor.

He had a sword on his hip. And as his primary option, he carried a special kind of short-range spear with a metal shaft as “thick as a weaver’s beam.” It had a cord attached to it and an elaborate set of weights that allowed it to be released with extraordinary force and accuracy. As the historian Moshe Garsiel writes, “To the Israelites, this extraordinary spear, with its heavy shaft plus long and heavy iron blade, when hurled by Goliath’s strong arm, seemed capable of piercing any bronze shield and bronze armor together.”

Can you see why no Israelite would come forward to fight Goliath? Then David appears. Saul tries to give him his own sword and armor so at least he’ll have a fighting chance.

David refuses. “I cannot walk in these,” he says, “for I am unused to it.” Instead he reaches down and picks up five smooth stones, and puts them in his shoulder bag. Then he descends into the valley, carrying his shepherd’s staff. Goliath looks at the boy coming toward him and is insulted.

He was expecting to do battle with a seasoned warrior. Instead he sees a shepherd—a boy from one of the lowliest of all professions—who seems to want to use his shepherd’s staff as a cudgel against Goliath’s sword. “Am I a dog,” Goliath says, gesturing at the staff, “that you should come to me with sticks?” What happens next is a matter of legend. David puts one of his stones into the leather pouch of a sling, and he fires at Goliath’s exposed forehead.

Goliath falls, stunned. David runs toward him, seizes the giant’s sword, and cuts off his head.

“The Philistines saw that their warrior was dead,” the biblical account reads, “and they fled.”

The battle is won miraculously by an underdog who, by all expectations, should not have won at all. This is the way we have told one another the story over the many centuries since. It is how the phrase “David and Goliath” has come to be embedded in our language—as a metaphor for improbable victory. And the problem with that version of the events is that almost everything about it is wrong.

Ancient armies had three kinds of warriors. The first was cavalry—armed men on horseback or in chariots. The second was infantry—foot soldiers wearing armor and carrying swords and shields. The
third were projectile warriors, or what today would be called artillery: archers and, most important, slingers.

Slingers had a leather pouch attached on two sides by a long strand of rope. They would put a rock or a lead ball into the pouch, swing it around in increasingly wider and faster circles, and then release one end of the rope, hurling the rock forward.

Slinging took an extraordinary amount of skill and practice. But in experienced hands, the sling was a devastating weapon. Paintings from medieval times show slingers hitting birds in midflight. Irish slingers were said to be able to hit a coin from as far away as they could see it, and in the Old Testament Book of Judges, slingers are described as being accurate within a “hair’s breadth.”

An experienced slinger could kill or seriously injure a target at a distance of up to two hundred yards.

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The Romans even had a special set of tongs made just to remove stones that had been embedded in some poor soldier’s body by a sling.

Imagine standing in front of a Major League Baseball pitcher as he aims a baseball at your head. That’s what facing a slinger was like—only what was being thrown was not a ball of cork and leather but a solid rock. The historian Baruch Halpern argues that the sling was of such importance in ancient warfare that the three kinds of warriors balanced one another, like each gesture in the game of rock, paper, scissors.

With their long pikes and armor, infantry could stand up to cavalry. Cavalry could, in turn, defeat projectile warriors, because the horses moved too quickly for artillery to take proper aim. And projectile warriors were deadly against infantry, because a big lumbering soldier, weighed down with armor, was a sitting duck for a slinger who was launching projectiles from a hundred yards away. “This is why the Athenian expedition to Sicily failed in the Peloponnesian War,” Halpern writes.

“Thucydides describes at length how Athens’s heavy infantry was decimated in the mountains by local light infantry, principally using the sling.” Goliath is heavy infantry. He thinks that he is going to be engaged in a duel with another heavy-infantryman, in the same manner as Titus Manlius’s fight with the Gaul. When he says, “Come to me, that I may give your flesh to the birds of the heavens and the beasts of the field,” the key phrase is “come to me.” He means come right up to me so that we can fight at close quarters. When Saul tries to dress David in armor and give him a sword, he is operating
under the same assumption. He assumes David is going to fight Goliath hand to hand. David, however, has no intention of honoring the rituals of single combat. When he tells Saul that he has killed bears and lions as a shepherd, he does so not just as testimony to his courage but to make another point as well: that he intends to fight Goliath the same way he has learned to fight wild animals—as a projectile warrior.

He runs toward Goliath, because without armor he has speed and maneuverability. He puts a rock into his sling, and whips it around and around, faster and faster at six or seven revolutions per second, aiming his projectile at Goliath’s forehead—the giant’s only point of vulnerability. Eitan Hirsch, a ballistics expert with the Israeli Defense Forces, recently did a series of calculations showing that a typical-size stone hurled by an expert slinger at a distance of thirty-five meters would have hit Goliath’s head with a velocity of thirty-four meters per second—more than enough to penetrate his skull and render him unconscious or dead.

In terms of stopping power, that is equivalent to a fair-size modern handgun. “We find,” Hirsch writes, “that David could have slung and hit Goliath in little more than one second—a time so brief that Goliath would not have been able to protect himself and during which he would be stationary for all practical purposes.”

What could Goliath do? He was carrying over a hundred pounds of armor. He was prepared for a battle at close range, where he could stand, immobile, warding off blows with his armor and delivering a mighty thrust of his spear. He watched David approach, first with scorn, then with surprise, and then with what can only have been horror—as it dawned on him that the battle he was expecting had suddenly changed shape. “You come against me with sword and spear and javelin,” David said to Goliath, “but I come against you in the name of the Lord Almighty, the God of the armies of Israel, whom you have defied. This day the Lord will deliver you into my hands, and I’ll strike you down and cut off your head…. All those gathered here will know that it is not by sword or spear that the Lord saves; for the battle is the Lord, and he will give all of you into our hands.” Twice David mentions Goliath’s sword and spear, as if to emphasize how profoundly different his intentions are. Then he reaches into his shepherd’s bag for a stone, and at that point no one watching from the ridges on either side of the valley would have considered David’s victory improbable.

David was a slinger, and slingers beat infantry, hands down. “Goliath had as much chance against David,” the historian Robert Dohrenwend writes, “as any Bronze Age warrior with a sword would have had against an opponent armed with a .45 automatic pistol.”
Why has there been so much misunderstanding around that day in the Valley of Elah? On one level, the duel reveals the folly of our assumptions about power. The reason King Saul is skeptical of David’s chances is that David is small and Goliath is large.

Saul thinks of power in terms of physical might. 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.

But there’s a second, deeper issue here. Saul and the Israelites think they know who Goliath is. They size him up and jump to conclusions about what they think he is capable of. But they do not really see him. The truth is that Goliath’s behavior is puzzling. He is supposed to be a mighty warrior.

But he’s not acting like one. He comes down to the valley floor accompanied by an attendant—a servant walking before him, carrying a shield. Shield bearers in ancient times often accompanied archers into battle because a soldier using a bow and arrow had no free hand to carry any kind of protection on his own. But why does Goliath, a man calling for sword-on-sword single combat, need to be assisted by a third party carrying an archer’s shield?

What’s more, why does he say to David, “Come to me”? Why can’t Goliath go to David? The biblical account emphasizes how slowly Goliath moves, which is an odd thing to say about someone who is alleged to be a battle hero of infinite strength. In any case, why doesn’t Goliath respond much sooner to the sight of David coming down the hillside without any sword or shield or armor? When he first sees David, his first reaction is to be insulted, when he should be terrified. He seems oblivious of what’s happening around him. There is even that strange comment after he finally spots David with his shepherd’s staff: “Am I a dog that you should come to me with sticks?” Sticks plural?

David is holding only one stick. What many medical experts now believe, in fact, is that Goliath had a serious medical condition. 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.) And furthermore, one of the common side effects of acromegaly is vision problems.
Pituitary tumors can grow to the point where they compress the nerves leading to the eyes, with the result that people with acromegaly often suffer from severely restricted sight and diplopia, or double vision.

Why was Goliath led onto the valley floor by an attendant? Because the attendant was his visual guide. Why does he move so slowly? Because the world around him is a blur. Why does it take him so long to understand that David has changed the rules? Because he doesn’t see David until David is up close. “Come to me, that I may give your flesh to the birds of the heavens and the beasts of the field,” he shouts out, and in that request there is a hint of his vulnerability. I need you to come to me because I cannot locate you otherwise. And then there is the otherwise inexplicable “Am I a dog that you come to me with sticks?” David had only one stick. Goliath saw two. 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. There is an important lesson in that for battles with all kinds of giants. The powerful and the strong are not always what they seem. David came running toward Goliath, powered by courage and faith. Goliath was blind to his approach—and then he was down, too big and slow and blurry-eyed to comprehend the way the tables had been turned. All these years, we’ve been telling these kinds of stories wrong. David and Goliath is about getting them right.

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 Arregúín-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. Arregúín-Toft then asked the question slightly differently. What happens in wars between the strong and the weak when the weak side does as David did and refuses to fight the way the bigger side wants to fight, using unconventional or guerrilla tactics? 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. We think of underdog victories as improbable events: that’s why the story of David and Goliath has resonated so strongly all these years. But Arregúín-Toft’s point is that they aren’t at all. Underdogs win all the time. Why, then, are we so shocked every time a David beats a Goliath? Why do we automatically assume that someone who is smaller or poorer or less skilled is necessarily at a disadvantage? One of the winning underdogs on Arregúín-Toft’s list, for example, was T. E. Lawrence (or, as he is better known, Lawrence of Arabia), who led the Arab revolt against the Turkish army occupying Arabia near the end of the First World War.
The British were helping the Arabs in their uprising, and their goal was to destroy the long railroad the Turks had built running from Damascus deep into the Hejaz Desert. It was a daunting task. The Turks had a formidable modern army. Lawrence, by contrast, commanded an unruly band of Bedouin. They were not skilled troops. They were nomads. Sir Reginald Wingate, one of the British commanders in the region, called them “an untrained rabble, most of whom have never fired a rifle.” But they were tough and they were mobile. The typical Bedouin soldier carried no more than a rifle, a hundred rounds of ammunition, and forty-five pounds of flour, which meant that he could travel as much as 110 miles a day across the desert, even in summer.

They carried no more than a pint of drinking water, since they were so good at finding water in the desert.

“Our cards were speed and time, not hitting power,” Lawrence wrote. “Our largest available resources were the tribesmen, men quite unused to formal warfare, whose assets were movement, endurance, individual intelligence, knowledge of the country, courage.”

The eighteenth-century general Maurice de Saxe famously said that the art of war was about legs, not arms, and Lawrence’s troops were all legs. In one typical stretch in the spring of 1917, his men dynamited sixty rails and cut a telegraph line at Buair on March 24, sabotaged a train and twenty-five rails at Abu al-Naam on March 25, dynamited fifteen rails and cut a telegraph line at Istabl Antar on March 27, raided a Turkish garrison and derailed a train on March 29, returned to Buair and sabotaged the railway line again on March 31, dynamited eleven rails at Hedia on April 3, raided the train line in the area of Wadi Daiji on April 4 and 5, and attacked twice on April 6. Lawrence’s masterstroke was an assault on the port town of Aqaba.

The Turks expected an attack from British ships patrolling the waters of the Gulf of Aqaba to the west. Lawrence decided to attack from the east instead, coming at the city from the unprotected desert, and to do that, he led his men on an audacious, six-hundred-mile loop—up from the Hejaz, north into the Syrian desert, and then back down toward Aqaba. This was in summer, through some of the most inhospitable land in the Middle East, and Lawrence tacked on a side trip to the outskirts of Damascus in order to mislead the Turks about his intentions. “This year the valley seemed creeping with horned vipers and puff-adders, cobras and black snakes,” Lawrence writes in Seven Pillars of Wisdom about one stage in the journey: We could not lightly draw water after dark, for there were snakes swimming in the pools or clustering in knots around their brinks. Twice puff-adders came twisting into the alert ring of our debating coffee-circle. Three of our men died of bites; four recovered after great fear and pain, and a swelling of the poisoned limb. Howeitat treatment was to bind up the part with snake-skin plaster, and read chapters of the Koran to the sufferer until he died. When they finally arrived at Aqaba, Lawrence’s band of several hundred warriors killed or captured
twelve hundred Turks and lost only two men. The Turks simply had not thought that their opponent would be crazy enough to come at them from the desert.

Sir Reginald Wingate called Lawrence’s men an “untrained rabble.” He saw the Turks as the overwhelming favorites. But can you see how strange that was? Having lots of soldiers and weapons and resources—as the Turks did—is an advantage. But it makes you immobile and puts you on the defensive. Meanwhile, movement, endurance, individual intelligence, knowledge of the country, and courage—which Lawrence’s men had in abundance—allowed them to do the impossible, namely, attack Aqaba from the east, a strategy so audacious that the Turks never saw it coming.

There is a set of advantages that have to do with material resources, and there is a set that have to do with the absence of material resources—and the reason underdogs win as often as they do is that the latter is sometimes every bit the equal of the former.

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. Part One of David and Goliath is an attempt to explore the consequences of that error. When we see the giant, why do we automatically assume the battle is his for the winning? And what does it take to be that person who doesn’t accept the conventional order of things as a given—like David, or Lawrence of Arabia, or, for that matter.

T. E. Lawrence could triumph because he was the farthest thing from a proper British Army officer. He did not graduate with honors from the top English military academy. He was an archaeologist by trade who wrote dreamy prose. He wore sandals and full Bedouin dress when he went to see his military superiors. He spoke Arabic like a native, and handled a camel as if he had been riding one all his life. He didn’t care what people in the military establishment thought about his “untrained rabble” because he had little invested in the military establishment.

And then there’s David. He must have known that duels with Philistines were supposed to proceed formally, with the crossing of swords. But he was a shepherd, which in ancient times was one of the lowliest of all professions. He had no stake in the finer points of military ritual.

Arreguín-Toft found the same puzzling pattern. When an underdog fought like David, he usually won. But most of the time, underdogs didn’t fight like David. Of the 202 lopsided conflicts in Arreguín-Toft’s database, the underdog chose to go toe-to-toe with Goliath the conventional way 152 times—and lost 119 times. In 1809, the Peruvians fought the Spanish straight up and lost; in 1816, the Georgians fought the Russians straight up and lost; in 1817, the Pindaris fought the British
straight up and lost; in the Kandyan rebellion of 1817, the Sri Lankans fought the British straight up and lost; in 1823, the Burmese chose to fight the British straight up and lost.

The list of failures is endless. In the 1940s, the Communist insurgency in Vietnam bedeviled the French until, in 1951, the Viet Minh strategist Vo Nguyen Giap switched to conventional warfare—and promptly suffered a series of defeats. George Washington did the same in the American Revolution, abandoning the guerrilla tactics that had served the colonists so well in the conflict’s early stages. “As quickly as he could,” William Polk writes in Violent Politics, a history of unconventional warfare, Washington “devoted his energies to creating a British-type army, the Continental Line. As a result, he was defeated time after time and almost lost the war.” It makes no sense, unless you think back to Lawrence’s long march across the desert to Aqaba. It is easier to dress soldiers in bright uniforms and have them march to the sound of a fife-and-drum corps than it is to have them ride six hundred miles through snake-infested desert on the back of camels.

It is easier and far more satisfying to retreat and compose yourself after every score—and execute perfectly choreographed plays—than to swarm about, arms flailing, and contest every inch of the basketball court. Underdog strategies are hard.

In the years leading up to the Second World War, the British government was worried. If, in the event of war, the German Air Force launched a major air offensive against London, the British military command believed that there was nothing they could do to stop it. Basil Liddell Hart, one of the foremost military theorists of the day, estimated that in the first week of any German attack, London could see a quarter of a million civilian deaths and injuries. Winston Churchill described London as “the greatest target in the world, a kind of tremendous, fat, valuable cow, tied up to attract the beast of prey.” He predicted that the city would be so helpless in the face of attack that between three and four million Londoners would flee to the countryside.

In 1937, on the eve of the war, the British military command issued a report with the direst prediction of all: a sustained German bombing attack would leave six hundred thousand dead and 1.2 million wounded and create mass panic in the streets. People would refuse to go to work. Industrial production would grind to a halt. The army would be useless against the Germans because it would be preoccupied with keeping order among the millions of panicked civilians. The country’s planners briefly considered building a massive network of underground bomb shelters across London, but they abandoned the plan out of a fear that if they did, the people who took refuge there would never come out. They set up several psychiatric hospitals just outside the city limits to handle what they expected would be a flood of psychological casualties. “There is every chance,” the report stated, “that this could cost us the war.” In the fall of 1940, the long-anticipated attack began.
Over a period of eight months—beginning with fifty-seven consecutive nights of devastating bombardment—German bombers thundered across the skies above London, dropping tens of thousands of high-explosive bombs and more than a million incendiary devices. Forty thousand people were killed, and another forty-six thousand were injured. A million buildings were damaged or destroyed. In the city’s East End, entire neighborhoods were laid waste. It was everything the British government officials had feared—except that every one of their predictions about how Londoners would react turned out to be wrong. The panic never came. The psychiatric hospitals built on the outskirts of London were switched over to military use because no one showed up. Many women and children were evacuated to the countryside as the bombing started. But people who needed to stay in the city by and large stayed. As the Blitz continued, as the German assaults grew heavier and heavier, the British authorities began to observe—to their astonishment—not just courage in the face of the bombing but something closer to indifference. “In October 1940 I had occasion to drive through South-East London just after a series of attacks on that district,” one English psychiatrist wrote just after the war ended: Every hundred yards or so, it seemed, there was a bomb crater or wreckage of what had once been a house or shop. The siren blew its warning and I looked to see what would happen. A nun seized the hand of a child she was escorting and hurried on. She and I seemed to be the only ones who had heard the warning. Small boys continued to play all over the pavements, shoppers went on haggling, a policeman directed traffic in majestic boredom and the bicyclists defied death and the traffic laws. No one, so far as I could see, even looked into the sky. I think you’ll agree this is hard to believe. The Blitz was war. The exploding bombs sent deadly shrapnel flying in every direction. The incendiaries left a different neighborhood in flames every night. More than a million people lost their homes. Thousands crammed into makeshift shelters in subway stations every night. Outside, between the thunder of planes overhead, the thud of explosions, the rattle of anti-aircraft guns, and the endless wails of ambulances, fire engines, and warning sirens, the noise was unrelenting.

In one survey of Londoners, on the night of September 12, 1940, a third said that they had gotten no sleep the night before, and another third said they got fewer than four hours.

Can you imagine how New Yorkers would have reacted if one of their office towers had been reduced to rubble not just once but every night for two and a half months? The typical explanation for the reaction of Londoners is the British “stiff upper lip”—the stoicism said to be inherent in the English character. (Not surprisingly, this is the explanation most favored by the British themselves.) But one of the things that soon became clear was that it wasn’t just the British who behaved this way. Civilians from other countries also turned out to be unexpectedly resilient in the face of bombing. Bombing, it became clear, didn’t have the effect that everyone had thought it would have. It wasn’t until the end of the war that the puzzle was solved by the Canadian psychiatrist J. T. MacCurdy, in a book called The Structure of Morale. MacCurdy argued that when a bomb falls, it divides the affected population into three groups.
The first group is the people killed. They are the ones for whom the experience of the bombing is—obviously—the most devastating. But as MacCurdy pointed out (perhaps a bit callously), “the morale of the community depends on the reaction of the survivors, so from that point of view, the killed do not matter. Put this way the fact is obvious, corpses do not run about spreading panic.” The next group he called the near misses: They feel the blast, they see the destruction, are horrified by the carnage, perhaps they are wounded, but they survive deeply impressed. “Impression” means, here, a powerful reinforcement of the fear reaction in association with bombing. It may result in “shock,” a loose term that covers anything from a dazed state or actual stupor to jumpiness and preoccupation with the horrors that have been witnessed.

Third, he said, are the remote misses. These are the people who listen to the sirens, watch the enemy bombers overhead, and hear the thunder of the exploding bombs. But the bomb hits down the street or the next block over. And for them, the consequences of a bombing attack are exactly the opposite of the near-miss group. They survived, and the second or third time that happens, the emotion associated with the attack, MacCurdy wrote, “is a feeling of excitement with a flavour of invulnerability.” A near miss leaves you traumatized. A remote miss makes you think you are invincible. In diaries and recollections of Londoners who lived through the Blitz, there are countless examples of this phenomenon. Here is one: “When the first siren sounded I took my children to our dug-out in the garden and I was quite certain we were all going to be killed. Then the all-clear went without anything having happened. Ever since we came out of the dug-out I have felt sure nothing would ever hurt us. Or consider this, from the diary of a young woman whose house was shaken by a nearby explosion: I lay there feeling indescribably happy and triumphant. “I’ve been bombed!” I kept on saying to myself, over and over again—trying the phrase on, like a new dress, to see how it fitted. “I’ve been bombed!… I’ve been bombed—me!” It seems a terrible thing to say, when many people were killed and injured last night; but never in my whole life have I ever experienced such pure and flawless happiness.”

So why were Londoners so unfazed by the Blitz? Because forty thousand deaths and forty-six thousand injuries—spread across a metropolitan area of more than eight million people—means that there were many more remote misses who were emboldened by the experience of being bombed than there were near misses who were traumatized by it. “We are all of us not merely liable to fear,” MacCurdy went on. “We are also prone to be afraid of being afraid, and the conquering of fear produces exhilaration…. When we have been afraid that we may panic in an air-raid, and, when it has happened, we have exhibited to others nothing but a calm exterior and we are now safe, 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.”
In the midst of the Blitz, a middle-aged laborer in a button-factory was asked if he wanted to be evacuated to the countryside. He had been bombed out of his house twice. But each time he and his wife had been fine. He refused. ‘What, and miss all this?’ he exclaimed. ‘Not for all the gold in China! There’s never been nothing like it! Never! And never will be again.’”