INTRODUCTION

The Roseto Mystery

"THESE PEOPLE WERE DYING OF OLD AGE. THAT'S IT."

out·li·er \-, lī(-ə)r\ noun

1: something that is situated away from or classed differently from a main or related body

2: a statistical observation that is markedly different in value from the others of the sample

1.

Roseto Valfortore lies one hundred miles southeast of Rome in the Apennine foothills of the Italian province of Foggia. In the style of medieval villages, the town is organized around a large central square. Facing the square is the Palazzo Marchesale, the palace of the Saggese family, once the great landowner of those parts. An archway to one side leads to a church, the Madonna del Carmine—Our Lady of Mount Carmine. Narrow stone steps run up the hill-side, flanked by closely clustered two-story stone houses with red-tile roofs.

For centuries, the *paesani* of Roseto worked in the marble quarries in the surrounding hills, or cultivated the fields in the terraced valley below, walking four and five miles down the mountain in the morning and then making the long journey back up the hill at night. Life was hard. The townsfolk were barely literate and desperately poor and without much hope for economic betterment until word reached Roseto at the end of the nineteenth century of the land of opportunity across the ocean.

In January of 1882, a group of eleven Rosetans—ten men and one boy-set sail for New York. They spent their first night in America sleeping on the floor of a tavern on Mulberry Street, in Manhattan's Little Italy. Then they ventured west, eventually finding jobs in a slate quarry ninety miles west of the city near the town of Bangor, Pennsylvania. The following year, fifteen Rosetans left Italy for America, and several members of that group ended up in Bangor as well, joining their compatriots in the slate quarry. Those immigrants, in turn, sent word back to Roseto about the promise of the New World, and soon one group of Rosetans after another packed their bags and headed for Pennsylvania, until the initial stream of immigrants became a flood. In 1894 alone, some twelve hundred Rosetans applied for passports to America, leaving entire streets of their old village abandoned.

The Rosetans began buying land on a rocky hillside connected to Bangor by a steep, rutted wagon path. They built closely clustered two-story stone houses with slate roofs on narrow streets running up and down the hillside. They built a church and called it Our Lady of Mount Carmel and named the main street, on which it stood, Gari-

baldi Avenue, after the great hero of Italian unification. In the beginning, they called their town New Italy. But they soon changed it to Roseto, which seemed only appropriate given that almost all of them had come from the same village in Italy.

In 1896, a dynamic young priest by the name of Father Pasquale de Nisco took over at Our Lady of Mount Carmel. De Nisco set up spiritual societies and organized festivals. He encouraged the townsfolk to clear the land and plant onions, beans, potatoes, melons, and fruit trees in the long backvards behind their houses. He gave out seeds and bulbs. The town came to life. The Rosetans began raising pigs in their backyards and growing grapes for homemade wine. Schools, a park, a convent, and a cemetery were built. Small shops and bakeries and restaurants and bars opened along Garibaldi Avenue. More than a dozen factories sprang up making blouses for the garment trade. Neighboring Bangor was largely Welsh and English, and the next town over was overwhelmingly German, which meant—given the fractious relationships between the English and Germans and Italians in those years—that Roseto stayed strictly for Rosetans. If you had wandered up and down the streets of Roseto in Pennsylvania in the first few decades after 1900, you would have heard only Italian, and not just any Italian but the precise southern Foggian dialect spoken back in the Italian Roseto. Roseto, Pennsylvania, was its own tiny, selfsufficient world—all but unknown by the society around it—and it might well have remained so but for a man named Stewart Wolf.

Wolf was a physician. He studied digestion and the

stomach and taught in the medical school at the University of Oklahoma. He spent his summers on a farm in Pennsylvania, not far from Roseto—although that, of course, didn't mean much, since Roseto was so much in its own world that it was possible to live in the next town and never know much about it. "One of the times when we were up there for the summer—this would have been in the late nineteen fifties—I was invited to give a talk at the local medical society," Wolf said years later in an interview. "After the talk was over, one of the local doctors invited me to have a beer. And while we were having a drink, he said, 'You know, I've been practicing for seventeen years. I get patients from all over, and I rarely find anyone from Roseto under the age of sixty-five with heart disease.'"

Wolf was taken aback. This was the 1950s, years before the advent of cholesterol-lowering drugs and aggressive measures to prevent heart disease. Heart attacks were an epidemic in the United States. They were the leading cause of death in men under the age of sixty-five. It was impossible to be a doctor, common sense said, and not see heart disease.

Wolf decided to investigate. He enlisted the support of some of his students and colleagues from Oklahoma. They gathered together the death certificates from residents of the town, going back as many years as they could. They analyzed physicians' records. They took medical histories and constructed family genealogies. "We got busy," Wolf said. "We decided to do a preliminary study. We started in nineteen sixty-one. The mayor said, 'All my

sisters are going to help you.' He had four sisters. He said, 'You can have the town council room.' I said, 'Where are you going to have council meetings?' He said, 'Well, we'll postpone them for a while.' The ladies would bring us lunch. We had little booths where we could take blood, do EKGs. We were there for four weeks. Then I talked with the authorities. They gave us the school for the summer. We invited the entire population of Roseto to be tested."

The results were astonishing. In Roseto, virtually no one under fifty-five had died of a heart attack or showed any signs of heart disease. For men over sixty-five, the death rate from heart disease in Roseto was roughly half that of the United States as a whole. The death rate from all causes in Roseto, in fact, was 30 to 35 percent lower than expected.

Wolf brought in a friend of his, a sociologist from Oklahoma named John Bruhn, to help him. "I hired medical students and sociology grad students as interviewers, and in Roseto we went house to house and talked to every person aged twenty-one and over," Bruhn remembers. This happened more than fifty years ago, but Bruhn still had a sense of amazement in his voice as he described what they found. "There was no suicide, no alcoholism, no drug addiction, and very little crime. They didn't have anyone on welfare. Then we looked at peptic ulcers. They didn't have any of those either. These people were dying of old age. That's it."

Wolf's profession had a name for a place like Roseto—a place that lay outside everyday experience, where the normal rules did not apply. Roseto was an *outlier*.

2.

Wolf's first thought was that the Rosetans must have held on to some dietary practices from the Old World that left them healthier than other Americans. But he quickly realized that wasn't true. The Rosetans were cooking with lard instead of with the much healthier olive oil they had used back in Italy. Pizza in Italy was a thin crust with salt, oil, and perhaps some tomatoes, anchovies, or onions. Pizza in Pennsylvania was bread dough plus sausage, pepperoni, salami, ham, and sometimes eggs. Sweets such as biscotti and taralli used to be reserved for Christmas and Easter; in Roseto they were eaten year-round. When Wolf had dieticians analyze the typical Rosetan's eating habits, they found that a whopping 41 percent of their calories came from fat. Nor was this a town where people got up at dawn to do yoga and run a brisk six miles. The Pennsylvanian Rosetans smoked heavily and many were struggling with obesity.

If diet and exercise didn't explain the findings, then what about genetics? The Rosetans were a close-knit group from the same region of Italy, and Wolf's next thought was to wonder whether they were of a particularly hardy stock that protected them from disease. So he tracked down relatives of the Rosetans who were living in other parts of the United States to see if they shared the same remarkable good health as their cousins in Pennsylvania. They didn't.

He then looked at the region where the Rosetans lived. Was it possible that there was something about living in the foothills of eastern Pennsylvania that was good for their health? The two closest towns to Roseto were Bangor,

which was just down the hill, and Nazareth, a few miles away. These were both about the same size as Roseto, and both were populated with the same kind of hardworking European immigrants. Wolf combed through both towns' medical records. For men over sixty-five, the death rates from heart disease in Nazareth and Bangor were three times that of Roseto. Another dead end.

What Wolf began to realize was that the secret of Roseto wasn't diet or exercise or genes or location. It had to be Roseto itself. As Bruhn and Wolf walked around the town, they figured out why. They looked at how the Rosetans visited one another, stopping to chat in Italian on the street, say, or cooking for one another in their backyards. They learned about the extended family clans that underlay the town's social structure. They saw how many homes had three generations living under one roof, and how much respect grandparents commanded. They went to mass at Our Lady of Mount Carmel and saw the unifying and calming effect of the church. They counted twenty-two separate civic organizations in a town of just under two thousand people. They picked up on the particular egalitarian ethos of the community, which discouraged the wealthy from flaunting their success and helped the unsuccessful obscure their failures.

In transplanting the *paesani* culture of southern Italy to the hills of eastern Pennsylvania, the Rosetans had created a powerful, protective social structure capable of insulating them from the pressures of the modern world. The Rosetans were healthy because of where they were *from*, because of the world they had created for themselves in their tiny little town in the hills.

"I remember going to Roseto for the first time, and you'd see three-generational family meals, all the bakeries, the people walking up and down the street, sitting on their porches talking to each other, the blouse mills where the women worked during the day, while the men worked in the slate quarries," Bruhn said. "It was magical."

When Bruhn and Wolf first presented their findings to the medical community, you can imagine the kind of skepticism they faced. They went to conferences where their peers were presenting long rows of data arrayed in complex charts and referring to this kind of gene or that kind of physiological process, and they themselves were talking instead about the mysterious and magical benefits of people stopping to talk to one another on the street and of having three generations under one roof. Living a long life, the conventional wisdom at the time said, depended to a great extent on who we were—that is, our genes. It depended on the decisions we made—on what we chose to eat, and how much we chose to exercise, and how effectively we were treated by the medical system. No one was used to thinking about health in terms of *community*.

Wolf and Bruhn had to convince the medical establishment to think about health and heart attacks in an entirely new way: they had to get them to realize that they wouldn't be able to understand why someone was healthy if all they did was think about an individual's personal choices or actions in isolation. They had to look *beyond* the individual. They had to understand the culture he or she was a part of, and who their friends and families were, and what town their families came from. They had to

appreciate the idea that the values of the world we inhabit and the people we surround ourselves with have a profound effect on who we are.

In *Outliers*, I want to do for our understanding of success what Stewart Wolf did for our understanding of health.

PART ONE

OPPORTUNITY

CHAPTER ONE

The Matthew Effect

"FOR UNTO EVERYONE THAT HATH SHALL
BE GIVEN, AND HE SHALL HAVE ABUNDANCE.
BUT FROM HIM THAT HATH NOT SHALL BE
TAKEN AWAY EVEN THAT WHICH HE HATH."

— MATTHEW 25:29

1.

One warm, spring day in May of 2007, the Medicine Hat Tigers and the Vancouver Giants met for the Memorial Cup hockey championships in Vancouver, British Columbia. The Tigers and the Giants were the two finest teams in the Canadian Hockey League, which in turn is the finest junior hockey league in the world. These were the future stars of the sport—seventeen-, eighteen-, and nineteen-year-olds who had been skating and shooting pucks since they were barely more than toddlers.

The game was broadcast on Canadian national television. Up and down the streets of downtown Vancouver, Memorial Cup banners hung from the lampposts. The arena was packed. A long red carpet was rolled out on the ice, and the announcer introduced the game's dignitaries. First came the premier of British Columbia, Gordon Campbell. Then, amid tumultuous applause, out walked

Gordie Howe, one of the legends of the game. "Ladies and gentlemen," the announcer boomed. "Mr. Hockey!"

For the next sixty minutes, the two teams played spirited, aggressive hockey. Vancouver scored first, early in the second period, on a rebound by Mario Bliznak. Late in the second period, it was Medicine Hat's turn, as the team's scoring leader, Darren Helm, fired a quick shot past Vancouver's goalie, Tyson Sexsmith. Vancouver answered in the third period, scoring the game's deciding goal, and then, when Medicine Hat pulled its goalie in desperation, Vancouver scored a third time.

In the aftermath of the game, the players and their families and sports reporters from across the country crammed into the winning team's locker room. The air was filled with cigar smoke and the smell of champagne and sweat-soaked hockey gear. On the wall was a handpainted banner: "Embrace the Struggle." In the center of the room the Giants' coach, Don Hay, stood mistyeyed. "I'm just so proud of these guys," he said. "Just look around the locker room. There isn't one guy who didn't buy in wholeheartedly."

Canadian hockey is a meritocracy. Thousands of Canadian boys begin to play the sport at the "novice" level, before they are even in kindergarten. From that point on, there are leagues for every age class, and at each of those levels, the players are sifted and sorted and evaluated, with the most talented separated out and groomed for the next level. By the time players reach their midteens, the very best of the best have been channeled into an elite league known as Major Junior A, which is the top of the pyramid. And if your Major Junior A team plays for the

Memorial Cup, that means you are at the very top of the top of the pyramid.

This is the way most sports pick their future stars. It's the way soccer is organized in Europe and South America, and it's the way Olympic athletes are chosen. For that matter, it is not all that different from the way the world of classical music picks its future virtuosos, or the way the world of ballet picks its future ballerinas, or the way our elite educational system picks its future scientists and intellectuals.

You can't buy your way into Major Junior A hockey. It doesn't matter who your father or mother is, or who your grandfather was, or what business your family is in. Nor does it matter if you live in the most remote corner of the most northerly province in Canada. If you have ability, the vast network of hockey scouts and talent spotters will find you, and if you are willing to work to develop that ability, the system will reward you. Success in hockey is based on *individual merit*—and both of those words are important. Players are judged on their own performance, not on anyone else's, and on the basis of their ability, not on some other arbitrary fact.

Or are they?

2.

This is a book about outliers, about men and women who do things that are out of the ordinary. Over the course of the chapters ahead, I'm going to introduce you to one kind of outlier after another: to geniuses, business tycoons, rock stars, and software programmers. We're going to uncover