

Planned reading time: 2 weeks (by 5/8/16)  
On average 1 chapter/day

### **Introduction - The Roseto Mystery**

- outlier: a statistical observation that is different from other values in the sample
- Roseto Valfortore is a village 100 miles southeast of Rome. Rosetans were illiterate and poor. They worked long hours and had to go across the hills for resources.
- By 1882, Rosetans started migrating to Bangor, Pennsylvania, where they started a more lively, self-sufficient, and prosperous version of Roseto.
- Stewart Wolf, a physician, discovered that the death rate in Roseto was extremely low. In the 1950s, heart attacks were the leading cause of death for American males under 65. But in Roseto, Pennsylvania, virtually no one had heart disease symptoms. There was also very little alcoholism, crime rates, and the likes. People only died because of old age. Roseto was an outlier.
- Wolf investigated this matter. It wasn't diet; Rosetans ate just as bad. It wasn't genetic; relatives of Rosetans living elsewhere don't live as long. The reason was because of the social structure. Rosetans stopped to chat on the streets; cooked for one another; lived under the same roof; had unifying beliefs at church.
- Wolf suggested that we have to look beyond the individual to understand a person's health. We have to understand the culture and the community where the individual is from. Gladwell wants to do to our understanding of success what Wolf did to the understanding of health.

### **Chapter 1 - The Matthew Effect**

- In Canada, hockey is a big deal. Kids started playing at a very young age; there is a league for practically every age class. The best make it to the Major Junior A, which is the most elite group of hockey players. Memorial Cup is for the top of Major Junior A. You can't buy your way into Major Junior A, regardless of your family status or wealth. Same concept goes to ballet, soccer, music, science, etc. It's the individual merit that gets you in. Or is it?
- We all know how successful people are like. Every time, we read the same pattern: a successful person rises to the very top from nothing. And it's important that they rise from nothing to be seen successful. That's not the correct understanding of success. We have to understand where the successful people come from. The tallest oak tree in the forest isn't the tallest because it grew from the hardest acorn. It is the tallest because other oak trees don't block its sunlight and lumberjacks and rabbits happen to not cut it down.
- Looking at the roster for the Giants, a large amount of players were born in Jan, Feb, and Mar. The same thing could be said about every other hockey league, professional or collegiate/junior. Jan is the most popular month, followed by Feb and Mar.
- The revelation: the cut off age class for hockey in Canada is January 1st. That means a ten-year old could play along side a kid who's not going to turn 10 for another 11 months or so. During adolescence, a few month gap makes a huge difference. These older kids have a physical advantage over their younger peers, thus getting first picked to more prestigious programs, which in turn increase their coaching quality, practice time, training time, and real game time, which inevitably turns them into really elite players. Same concept goes to soccer, baseball, and other sports with a cut off age tier. Of course, this applies to education and test scores as well.
- This is where the problem with individual merit comes in, according to Gladwell. The play field should be leveled, he suggested. The rules as we, society, write have a large impact on who will and won't make it, but the rules are often overlooked. We are too quickly to give awe to the successful and criticize the unsuccessful. I see where Gladwell is coming from. I acknowledge the data and what it suggests. I do see how people born in the last half of the year could be

disadvantaged in many fields, but I don't think it's a sure-fire factor. I bet if the younger hockey kids put in more practice hours to make up for the physical disadvantage, they'll probably make it too. Besides, wouldn't that make the victory for the statistically disadvantaged a lot sweeter and satisfying?

- The Matthew Effect got its name from the New Testament (some Bible stuff I don't really understand). But basically it's a self-fulfilled prophecy where the incorrect judgment in the beginning gets justified overtime and eventually becomes the reality, thus giving a false impression that the "prophecy" was right from the get go. In the hockey example, the older kids weren't necessarily better. But through cumulative advantage, they actually became better over the years. Same thing could attribute to questions like "why do the richest get the most tax breaks". Again, I see how accumulative advantage could play a big part, but that's why the disadvantage has to put in extra effort to make up for the difference. Or they could just not play hockey or soccer or do well in school? Why the hell would I need to care about evening out the play field for these people? Do you know what it takes to even out the play field? Resources. Money. Time. Do you know what that also means? Higher taxes. Nope, I'm good.

## **Chapter 2 - 10000-hour Rule**

- Bill Joy, co-founder of Sun Microsystems, did his undergrad at UMich and PhD at Berkeley. He's one of the most influential individuals in the history of computing, responsible for most of UNIX and Java rewriting.
- In a research done by psychologist K. Anders Ericsson, violinists were split into 3 groups: world-class, merely good, and teacher-material. Their respective hours of practice in their career: 10k hours, 8k, and 4k. Same pattern emerges for pianists. There hasn't been any "grinders" who don't become an expert after 10k hours of practice, nor any "naturals" who become expert in less than 10k hours, or roughly 10 years. Sure, Mozart started writing music at 6, but his dad wrote most of them. His best work didn't emerge until he was 21.
- Bill Joy was no exception. He had the will to learn. Something I really want to say I do. I'm putting in the hours. Anyway, apparently in the 1960s, you'd code by using punch cards, which would then be queued at the main frame. Then time-sharing happened; everyone could code remotely on terminals at the same time. Joy found a bug in UMich 24-hr a day Computer Center that let him code as long as he wanted. He coded all day and night and by the time he wrote the programs that are still used today, he had put in roughly 10k hrs of work.
- The Beatles put on 1200 live performances. Holy shit that's a lot. Most modern bands probably can't even do that many...
- Bill Gates practically programmed for 7 years straight before dropping out of Harvard to start Microsoft. His father was a wealthy lawyer and mother was a daughter of a banker. They sent Gates to Lakeside, an elite middle school type of thing catered for the super-rich. Gates then went through a series of favorable events where he and his friends constantly got exposed to time-shared computer times and software development.
- In January 1975, the most breakthrough thing happened in SV: the Altair 8800, the first \$397 computer kit that rivaled IBM main frames. This was like the Raspberry Pi at the time. History has shown that if you were born in the window of 1830-1840, the peak of the Industrial Revolution in the U.S, then you were presented with an extraordinary opportunity to become stupid rich. Rockefeller, Chase, Carnegie, Morgan, Pullman. Same thing happened in 1975 when the personal computer revolution was sparked. To be in this prime time, you should be in your 20s by 1975 or so, because you're old enough to have enough experience under your belt (fresh out of college) and young enough to not work at IBM or have kids. So 1954-55 was the perfect birth year to become SV superstars. Who were born in 1954-55? Jobs, Gates, Allen, Ballmer, Schmidt, Joy.

### **Chapter 3 - The Trouble with Geniuses Part 1**

- Chris Langan was a genius with an IQ score of 195 (Einstein had 150). He had the ability to brief a semester worth of textbooks in 2 days; mastered pretty much every field at a very young age, and of course, perfected all his tests including the SAT with ease. He was on the show 1 vs. 100, a trivia type of game show where he would compete with a mob of 100 people to answer trivia questions for a \$1m prize. He took the cash when his total prize was at \$250k.
- Stanford Professor Lewis Terman, the creator of the Stanford-Binet IQ test, conducted a large-scale study of 1k+ genius kids at a young age. The study followed them throughout their lives. Extraordinary achievement is less about talent than it is about opportunity.
- Intelligence matters less as you go up the IQ scale. Once you reach 120, anything above seems to matter very little. This is because of IQ threshold. As long as you are smart enough at the threshold, you can accomplish the same things people with much higher IQ can. Same thing applies to, say basketball. As long as you're at a certain height, you're capable of being great. MJ wasn't the tallest, but he was certainly one of the best.
- Introducing the divergence test: list as many use cases for a brick and a blanket. People with genius IQ only list the practical use cases, whereas the ones with lower IQ had more creative answers. Since both groups are at threshold, they are both qualified and capable of accomplishing the same thing.
- Terman's Termites (the group of the elite intellects) turned out to be not so successful. They did earn good incomes and held good jobs, but nothing that amazing for their IQ. None of them won any Nobel Prize. As a matter of fact, 2 Nobel winners were rejected at the beginning of his study because their IQs weren't high enough. Intelligence is then not absolute; intellect and success aren't necessarily correlated.

### **Chapter 4 - The Trouble with Geniuses Part 2**

- Chris Langan had a rough childhood. He got scholarships to UChicago and Reed College; he picked the latter. His mother failed to send in the financial statement, causing his scholarship renewal to be terminated. Langan dropped out of Reed College. He enrolled in Montana State, whose faculties declined to switch him to afternoon sessions to help him with his car problems.
- Robert Oppenheimer, one of the lead scientists for the Manhattan Project during WWII, had a beautiful mind for theoretical physics. He had depression all his life; he once tried to poison his tutor for making him take a class he didn't enjoy. He got into a probation and was sent to a psychiatrist. Wait, what the hell? Langan lost his scholarship just because his mom didn't send in the documents and basically got screwed for the rest of his academic career, while Oppenheimer got sent to a psychiatrist for a murder attempt?
- "practical intelligence": knowing what to say to whom, knowing when to say it, and knowing how to say it for maximum effect. Having high IQ (analytical intelligence) is orthogonal to having practical intelligence; having one doesn't imply having the other. We know that a large part of analytical intelligence is genetic. Practical intelligence comes from family or culture. The wealthy teach their kids to have a sense of entitlement: they're exposed to a variety of experiences; have better training, aren't afraid to speak up and assert their rights; are comfortable asking questions and negotiating, even with authorities. This gives them a huge advantage in life.
- Terman's Termites were split into 3 groups in their adulthood: A, B, and C, denoting the level of successes. A group is the superstars group; B is the satisfactory group; and C is the failure group. The difference here is the family background. Most of the A groups were the middle-class: well groomed, well educated. The C group were poor and were not prepared for the real world; they were squandered talents.

- Chris Langan now lives in a farm in Missouri, reading books and tending to farm animals. He still doesn't change the world with his genius. He doesn't know how to navigate the world because he doesn't have anyone to help him (why is this still the case?). No one - not rock stars, not professional athletes, not software billionaires, and not even geniuses - ever makes it alone.

## **Chapter 5 - The Three Lessons of Joe Flom**

- Joe Flom, the last named partner at Skadden law firm - the most powerful law firm at Wall Street - had a rough childhood. He got admitted to Harvard Law but couldn't land a job. He had to join a startup law firm started by Marshall Skadden and Leslie Arps. He then became the managing partner in 1954. Flom was an awkward-looking, short, overweight, and a little hunched guy. Another rag-to-riches story, but at this point in the book, we know too well that isn't the case. Everyone is the product of where they came from and their environment.
- We'll explore the seemingly disadvantages that Flom had: poor family, being Jew when Jewish was discriminated, grew up during Depression, which turned out to be advantages. Flom is an outlier and we'll see how he handled his opportunity just like any outlier did.
- Back in the 1950s, in order to work at a known law firm, you had to come from the "right school" and the "right social class". You must also have charismatic appearance and pleasing manner. In another word, if you're not from Harvard Law school and a tall, handsome white male groomed in a middle class family, chances were you'd not make it at big law firms. Flom was exactly not big law firm material because he was unattractive, socially inapt, and a part of a lower social class. Back then, it was uncommon for Fortune 500 companies to sue each other or involve in hostile takeovers, as those were ungentlemanly. Big law firms would not want to take those deals so they'd outsource the work to lower class law firm that people like Flom could only join. So for 2 decades, Flom got his 10k hours in proxy fights and handling hostile takeovers. Then starting in 1970s, the market started to internationalize, federal regulations loosened; it was easier to borrow money. All of these led to a massive number of corporate takeovers, and Flom's firm was ready. If Flom wasn't Jewish, he wouldn't have had to work at a lower tier law firm in the 1950s, thus would not have been a great lawyer for hostile takeovers and therefore would not have been successful when the time came in 1970s.
- In the 1930s, there was a demographic trough due to the Great Depression: the number of babies born per 1000 people dropped significantly. This gave advantage to people like Flom who was part of the demographic trough of the 1930s. Hospitals, schools, college, and public amenities were wildly available until their adulthood. Then, the job market was abundant when they were done with school. Ted Friedman, one of NY's finest litigators in the 1970s, was born to a family similar to Flom's. He was part of the demographic trough. He went to the best public schools in NY, had 2 options for college: one free and the other would cost \$450. He had no problem finding jobs even in school because the demand was so high and the supply was not. Don't forget, like Flom, Friedman was from a Jewish immigrant family. Friedman's time allowed him to be successful if he was willing to put in the hard work. He was able to put himself through school just by simply working hard.
- In Europe during this time, the Jews weren't allowed to own land, so their primary skills involved sewing, dress making, clothes altering, etc., while the other were mostly farmers or peasants or factory workers. When these different ethnic groups migrated to NY, they practically did the same line of work since that was the only skill they had. Plot twist: the garment industry was jumping leaps and bounds in NY at this time. If you were an Italian or Irish immigrant, you'd probably work in the factory or a farm. Once your products leave your assembly line or factory, you had no idea what happened next. The Jewish, however, were able to witness how the garment industry transformed. Louis and Regina Borgenicht were the perfect example. They started their own child aprons business using their skills in the garment

industry. Louis had the opportunity to learn market research, pricing, manufacturing, and negotiating with the Yankees - all of which were only possible when you could make a sellable product from beginning to end; not so much when you were farming or assembling. Not to forget: these immigrants, regardless of ethnicity, worked really hard. The conditions were horrible and wages were low. The only advantage that the Borgenicht had was the skills applicable to the booming of the garment industry, which allowed them to own their own small businesses. They worked with other Jewish immigrants (like the Bloomingdale brothers) to become key players in the garment industry. The only difference between them and immigrants from other places was their industry was hot at the time. They all worked hard (deep quote: hard work is only prison sentence if it has no meaning).

- Just like 1955 was the prime birth year for SV tycoons and 1830 was for industrial giants, 1930 was the year to be born to become the top dog in NY's legal profession. On top of that, you'd also be likely to be a Jewish descent; your parents owned a business in the garment industry when they came to NY. A study showed an interesting pattern: the children of these Jewish immigrants who turned business owners in the garment industry all became lawyer and doctor. The Floms, the Borgenichts. Need more convincing? Black Rock's prominent partners: Watchtell, Lipson, Rosen, and Katz were all born in 1930-1931. Their parents worked in the garment industry; had strong ties with the Jewish community, and attended NY public schools.

### **Chapter 6: Harlan, Kentucky**

- Harlan, Kentucky was a small and troublesome town in the 1800s. The 2 founding families, the Howards and the Turners, were rivals. They went through a series of gun fights, killing a number of people. When it was Will Turner's, a grandson in the Turner family, last night, he howled in pain only to get yelled at by his mother: "Die like a man, like your brother did." Will shut his mouth and died.
- In the effort of studying why there is a pattern of homicide between the families in the South, a concept of "culture of honor" emerges. Although homicide rate was high, it wasn't due to robbery or economic gains, it was personal. People killed each other for reasons they all understood and accepted. To further study the culture of honor, it's important to go back hundreds of years.
- The point: culture differences play a huge part in how we turn out. Just like how cumulative advantages: when and where you were born, what your parents did for a living, what circumstances contributed to your upbringing, what you inherit from the generation before can also play a large role in your success.

### **Chapter 7 - The Ethnic Study of Plane Crashes**

- On August 5, 1997, the captain of Korean Air flight 801 and his crews took the plane to Guam at 10:30 PM. When they were about to land at Guam airport, it was raining. They couldn't see the runway and attempted to circle around to land again, but that didn't go too well. 228 of the 254 people on board were dead as \$60 million and 212k Kg of steel slamming into rocky ground at 100 mph.
- Korean Air was pretty much shit. The President had to speak up, saying that it hurt Korea's credibility. But then in 1999, Korean Air turned itself around. Now in 2016, Korean Air has been rated as one of the safest airline in the world. How the hell did they turn things around? Acknowledgement of the importance of cultural legacy, son.
- Plane crashes rarely happen in real life. When they do happen, it's usually due to a series of errors that would have been minimal if happened in isolation. This is true not only in plane crashes but in any industrial accidents. It's not one big anomaly that caused the entire accident but rather a series of errors that lead up to the event.
- Columbian airliner Avianca flight 052 in January 1990 was a classic accident in aviation. The

- main pilot had to control a handful of equipments over a long period of time. He was so tired he stopped trying to speak English. His copilot was useless; didn't even talk to the ATC properly. They didn't make the right decisions and everything ended in a miserable accident.
- Suren Ratwatte, a veteran pilot, talked about one of his flight from Dubai to the U.S. He had an Indian woman who was having a stroke in the back. His plane just took off from Dubai so landing a 707 with an extra 60 tons of fuel anywhere was a challenge. He had to weigh his costs; he decided to land in Helsinki, Finland, where he never landed before. He had to *communicate* with a bunch of people in different manners: the ATC, the ground at Helsinki, the doctors, the copilots, and HQ at Dubai. But he successfully landed because he communicated properly.
  - The transcript on Avianca 052 was odd. One of the last lines was a casual "...ah, we'll try again. We're running low on fuel." By definition, all airplanes approaching their destinations are low on fuel. The ATC must have treated that comment as a casual one; there was no sense of urgency. He should have sounded panicked and clarified they didn't have enough fuel to land.
  - We mitigate our speech when we talk to our superiors. We don't use commands but rather hint at what we want. This is bad when the captain is in the flying seat and the first officers aren't as comfortable commanding his boss to do something in response to various situations. Historically speaking, it is less likely for a plane to crash if the least experienced pilot is in the flying seat because the others won't have trouble speaking up and ordering a change of action in response to danger.
  - Ratwatte recalled that his officers had no trouble pointing out his errors, explaining why he had such a high success rate. The case of Avianca 052 was just inexplicably weird. Were the pilots that incompetent? Gladwell thinks not, but rather because of the fact that they were Columbian. The Americans wouldn't put up with that situation.
  - In 1960s and 1970s, Dutch psychologist Geert Hofstede conducted a study and formulated what is now the Hofstede's Dimensions, a popular paradigm in cross-cultural psychology. Cultures can be usefully distinguished by individualism-collectivism scale, or how much a person is expected to look after himself. US is the top of this scale. Another dimension is uncertainty avoidance, or how much ambiguity is tolerated. The most interesting dimension is Power Distance Index (PDI), or how much a particular culture respects and values authority. So apparently NY ATC are notoriously intimidating; they are known to be blunt, aggressive, and bossy. Typical New Yorkers. Avianca 052 was flying to JFK and the pilots were Columbians. Columbia has a high PDI; the copilots didn't want to appear rebellious or doubtful of the captain's judgement. The captain was tired and NY ATC was "angry", so the copilot had trouble warning everyone about the fact that they wouldn't have enough fuel to land. And they were pretty screwed.
  - Same concept applies to Korean Air 801. The flight engineer and the first officer were subordinate of the captain, who was falsely confident on the fact that he would be able to land in Guam using visual approach. Bad weather, missing glide scope, and a tired captain, now adding the fact that the crews were all Korean, explained a lot about the accident. The engineer and first officer were trying to warn the captain about the bad weather and the missing glide scope at Guam, but couldn't get the message across. Korea, much like other Asian countries, has a really high PDI. The relation between ranking matters a lot.
  - Delta's David Greenberg came in, had every Korean pilots learn to speak English if they wanted to remain pilots. Greenberg created anew training program that issued the Korean PDI problem. First-officers were required to take control of the plane if he was certain the captain has made a mistake and is not responding according to protocol. He won't be bitch slapped anymore.

## Chapter 8 - Rice Paddies and Math Tests

- China has grown a lot over the years, but not so long ago, most of this country had been rice paddies. Rice paddies are not as easy to cultivate as wheat field. There are a lot of consideration and engineering that go into the rice paddies: the amount of fertilizer, the precise amount of water, the level of moisture and hardness of the clay ground, etc. Rice makes the world go round in China.
- It has been seen that Asian kids are better at math than their Western counterparts. One of the possible explanations is that the linguistic of the number system in China is much simpler. For example, 11 is ten-one instead of eleven. On top of that, the pronunciation for each digit is also shorter, taking only a third or a quarter of a second to pronounce. This allows Asian kids to memorize more number sequence in the same time span. They can learn how to count faster at a younger age and do math operations much more efficiently because of the way the numbers are pronounced. Asian kids score 98th percentile in Math compared to 36th percentile of their Western counterpart.
- The thing about rice paddies is that they are super small; about the size of a hotel room. A rice field often consists of 2 or 3 paddies. Working as a farmer on a rice field is probably the most labor-extensive job out there. While farmers elsewhere in the world might be idle during winters or off-seasons, farmers in Southern China don't. During the brief dry period from November to February, they occupy themselves with side tasks like fixing the hut, leveling the clay foundation, making straw hat to sell, catching rattle snakes for food, or sending their sons to other villages for work. When Spring comes, they're back to working on the rice field from dawn. Chinese agriculture isn't machine-focused like the Western counterpart. If you work a little bit more diligently on the watering, making sure the fertilizer levels are spot on, or making sure the clay ground is perfectly level, you end up harvesting a bigger crop. Chinese rice field farmers are among the most hardworking people on Earth.
- 3000 hours a year. That's how much time a rice farmer has to bend over to weed and cultivate amid crazy heat, humidity, and leeches. But these people find meaning in their work. The effort-reward correlation is high in rice farming. The harder you work, the more crop you get. "No one who wakes up before dawn 360 days a year should fail to make his family rich". The fact that these farmers find meaning in their hard work explains the cultural legacy of Asian students' willingness to put in more work.
- A professor at Berkeley did a study on how people solve math problems. He video taped Reese, a nurse who hasn't touch any math for years. She was asked to find the equation of a vertical line by inputting the x and y axis values. After trying and asking questions for 22 minutes, she figured out it was not impossible to have a  $y=$  equation for a vertical line. What was interesting about Reese's case was that she spent a good 22 minutes trying to figure out the problem, whereas an average 8th grader would give up after anywhere from 30s to 5 minutes. Success is a function of persistence and doggedness and the willingness to work hard for 22 minutes to make sense of something that most people would give up on after 30s.
- So why are students from China, Japan, South Korea, and Singapore so successful? It's safe to say it's because they're more hard working and willing to be persistent. All of these countries were what Gladwell called "wet-rice agricultural countries". Coincidence? I think not. These students are descendants of the most hardworking human beings on Earth. They find meaningful work amidst poverty and uncertainty. Legacy matters.

## **Chapter 9 - Marita's Bargain**

- Knowledge is Power Program (KIPP) became the most desirable school program in New York. Its students became exceptionally good at math and readings, all thanks to cultural legacies.
- Remember the rice patties? It turns out they became more and more fertile as the farmers harvested more crops every season. There are 2-3 crops per year, with very little "rest" time for the rice fields. In Western agriculture, the opposite is true. Wheat fields need to be rested or

they'd be exhausted. Okay so what does all of this have to do with anything? There was a study that measured how low, middle, and high class students performed in a year. The metrics were math and reading scores. Data showed that over the course of 5 years, high class students outperformed their middle- and low-class counterparts. The common misconception is that the poorer kids were naturally not as smart or the schooling system was failing them. Neither was true. Data showed that poorer kids actually learned more than their richer friends during the school year (Sep-Jun). However, their reading scores lagged way behind their richer friends after coming back from summer vacation (Jun-Sep). Reason? Richer kids had more productive summer plans: they could afford books, special summer camps, special training classes, etc. The poor kids would be watching TV or playing outside. It's clear. Schools work; there is very little discrepancy between the students' learning after a school year regardless of their social class. Long summer vacations seem to be the more probable culprit as to why some student outperformed their poorer friends. Now all of the sudden the Asian math supremacy thing made sense. South Korean school year is 220-day long, 243 for Japan, and 180 for the U.S. Asian school don't seem to take long breaks. Why would they? Their ancestors spent 360 days waking up before dawn to work on the fields.

- KIPP program was legit. They had short summer vacations, 7:25AM - 7PM schedule. These kids knew about grit and effort and reward. They had classes that were longer than those at traditional schools. This allowed them extra time to learn and digest. Ex: Maria, a 12-year old KIPP student, shared a one-bedroom apartment with her mother. She would wake up at 5 to catch the bus, go through school until 5, and do her homework from 6-9 or 10. She also had to come in on Saturdays. Is that a lot to ask for a child? Meh, depends on who you ask. 90% of KIPP students get scholarships, 80% go to college. KIPP and Maria had a bargain. She would get up early and work her ass off for years and KIPP would get her a chance to get out of poverty.
- Everything we have learned from this book says that success follows a predictable course. It's not the brightest who succeed. If it was, Chris Langan would be up there with Einstein. Nor is it simply a sum of decisions and efforts were made on our own behalf. It is, rather, a gift. Outliers are those who have been given opportunities and who have had the strength and presence of mind to seize them. For hockey and soccer players born in Jan, it's a better chance to go all-star. For the Beatles, it was Hamburg. Bill Gates, the lucky break of being born at the right time and getting a gift of a computer terminal in junior high. For Korean Air, it was what they did to their pilots: an opportunity to escape cultural legacy constraints.
- We often look at the best and brightest and self-made and think outliers spring out naturally from the earth. To build a better world, we need to replace the lucky breaks and arbitrary advantages with a society that provides an equal opportunity for all. Marita doesn't need a new laptop or a smaller class or a bigger apartment. Nor does she need higher IQ or to be born at the right time. She just needs a chance.

### **Epilogue: A Jamaican Story**

- Something about his family. Basically reiterating all the concepts.