1 ELON’S WORLD

2 AFRICA

3 CANADA

4 ELON’S FIRST START-UP

5 PAYPAL MAFIA BOSS

6 MICE IN SPACE

PHOTOGRAPHIC INSERT

7 ALL ELECTRIC

8 PAIN, SUFFERING, AND SURVIVAL

9 LIFTOFF

10 THE REVENGE OF THE ELECTRIC CAR

11 THE UNIFIED FIELD THEORY OF ELON MUSK

Chapter 1: Elon’s world

To bring to the light the entrepreneurial nature of Elon Musk, the book draws a comparison of Elon with the Steve Jobs. As in these lines:

*Musk’s ready willingness to tackle impossible things has turned him into a deity in Silicon Valley, where fellow CEOs like Page speak of him in reverential awe, and budding entrepreneurs strive “to be like Elon” just as they had been striving in years past to mimic Steve Jobs. Silicon Valley, though, operates within a warped version of reality, and outside the confines of its shared fantasy, Musk often comes off as a much more polarizing figure. He’s the guy with the electric cars, solar panels, and rockets peddling false hope. Forget Steve Jobs. Musk is a sci-fi version of P. T. Barnum who has gotten extraordinarily rich by preying on people’s fear and self-hatred.*

*…*

*Yet, in the early part of 2012, the cynics like me had to take notice of what Musk was actually accomplishing. His once-beleaguered companies were succeeding at unprecedented things. SpaceX flew a supply capsule to the International Space Station and brought it safely back to Earth. Tesla Motors delivered the Model S, a beautiful, all-electric sedan that took the automotive industry’s breath away and slapped Detroit sober. These two feats elevated Musk to the rarest heights among business titans. Only Steve Jobs could claim similar achievements in two such different industries, sometimes putting out a new Apple product and a blockbuster Pixar movie in the same year. And yet, Musk was not done. He was also the chairman and largest shareholder of SolarCity, a booming solar energy company poised to file for an initial public offering. Musk had somehow delivered the biggest advances the space, automotive, and energy industries had seen in decades in what felt like one fell swoop.*

*…*

*It was a Saturday, and the parking lot was full of cars. Inside of the Tesla offices, hundreds of young men were at work— some of them designing car parts on computers and others conducting experiments with electronics equipment on their desks. Musk’s uproarious laugh would erupt every few minutes and carry through the entire floor. When Musk came into the meeting room where I’d been waiting, I noted how impressive it was for so many people to turn up on a Saturday. Musk saw the situation in a different light, complaining that fewer and fewer people had been working weekends of late. “We’ve grown fucking soft,” Musk replied. “I was just going to send out an e-mail. We’re fucking soft.” (A word of warning: There’s going to be a lot of “fuck” in this book. Musk adores the word, and so do most of the people in his inner circle.) This kind of declaration seems to fit with our impressions of other visionaries. It’s not hard to imagine Howard Hughes or Steve Jobs chastising their workforce in a similar way. Building things— especially big things—is a messy business. In the two decades Musk has spent creating companies, he’s left behind a trail of people who either adore or despise him. During the course of my reporting, these people lined up to give me their take on Musk and the gory details of how he and his businesses operate.*

*…*

*He’s set about building something that has the potential to be much grander than anything Hughes or Jobs produced.*

*…*

Brief note about Musk’s companies:

*Musk should have been part of the malaise that followed the Internet bubble burst. He jumped right into dot-com mania in 1995, when, fresh out of college, he founded a company called Zip2—a primitive Google Maps meets Yelp. That first venture ended up a big, quick hit. Compaq bought Zip2 in 1999 for $307 million. Musk made $22 million from the deal and poured almost all of it into his next venture, a start-up that would morph into PayPal. As the largest shareholder in PayPal, Musk became fantastically well-to-do when eBay acquired the company for $1.5 billion in 2002. Instead of hanging around Silicon Valley and falling into the same funk as his peers, however, Musk decamped to Los Angeles. The conventional wisdom of the time said to take a deep breath and wait for the next big thing to arrive in due course. Musk rejected that logic by throwing $100 million into SpaceX, $70 million into Tesla, and $10 million into SolarCity. Short of building an actual money-crushing machine, Musk could not have picked a faster way to destroy his fortune. He became a one-man, ultra-risk-taking venture capital shop and doubled down on making super-complex physical goods in two of the most expensive places in the world, Los Angeles and Silicon Valley. Whenever possible, Musk’s companies would make things from scratch and try to rethink much that the aerospace, automotive, and solar industries had accepted as convention.*

*With SpaceX, Musk is battling the giants of the U.S. military-industrial complex, including Lockheed Martin and Boeing. He’s also battling nations—most notably Russia and China. SpaceX has made a name for itself as the low-cost supplier in the industry. But that, in and of itself, is not really good enough to win. The space business requires dealing with a mess of politics, back-scratching, and protectionism that undermines the fundamentals of capitalism. Steve Jobs faced similar forces when he went up against the recording industry to bring the iPod and iTunes to market. The crotchety Luddites in the music industry were a pleasure to deal with compared to Musk’s foes who build weapons and countries for a living. SpaceX has been testing reusable rockets that can carry payloads to space and land back on Earth, on their launch pads, with precision. If the company can perfect this technology, it will deal a devastating blow to all of its competitors and almost assuredly push some mainstays of the rocket industry out of business while establishing the United States as the world leader for taking cargo and humans to space. It’s a threat that Musk figures has earned him plenty of fierce enemies. “The list of people that would not mind if I was gone is growing,” Musk said. “My family fears that the Russians will assassinate me.”*

*With Tesla Motors, Musk has tried to revamp the way cars are manufactured and sold, while building out a worldwide fuel distribution network at the same time. Instead of hybrids, which in Musk lingo are suboptimal compromises, Tesla strives to make all-electric cars that people lust after and that push the limits of technology. Tesla does not sell these cars through dealers; it sells them on the Web and in Apple-like galleries located in high-end shopping centers. Tesla also does not anticipate making lots of money from servicing its vehicles, since electric cars do not require the oil changes and other maintenance procedures of traditional cars. The direct sales model embraced by Tesla stands as a major affront to car dealers used to haggling with their customers and making their profits from exorbitant maintenance fees. Tesla’s recharging stations now run alongside many of the major highways in the United States, Europe, and Asia and can add hundreds of miles of oomph back to a car in about twenty minutes. These so-called supercharging stations are solar-powered, and Tesla owners pay nothing to refuel. While much of America’s infrastructure decays, Musk is building a futuristic end-to-end transportation system that would allow the United States to leapfrog the rest of the world. Musk’s vision, and, of late, execution seem to combine the best of Henry Ford and John D. Rockefeller.*

*With SolarCity, Musk has funded the largest installer and financer of solar panels for consumers and businesses. Musk helped come up with the idea for SolarCity and serves as its chairman, while his cousins Lyndon and Peter Rive run the company. SolarCity has managed to undercut dozens of utilities and become a large utility in its own right. During a time in which clean-tech businesses have gone bankrupt with alarming regularity, Musk has built two of the most successful clean-tech companies in the world. The Musk Co. empire of factories, tens of thousands of workers, and industrial might has incumbents on the run and has turned Musk into one of the richest men in the world, with a net worth around $10 billion.*

Chapter 2: Africa

*THE PUBLIC FIRST MET ELON REEVE MUSK IN 1984. The South African trade publication PC and Office Technology published the source code to a video game Musk had designed. Called Blastar, the science-fiction-inspired space game required 167 lines of instructions to run. This was back in the day when early computer users were required to type out commands to make their machines do much of anything. In that context, Musk’s game did not shine as a marvel of computer science but it certainly surpassed what most twelve-year-olds were kicking out at the time. Its coverage in the magazine netted Musk five hundred dollars and provided some early hints about his character. The Blastar spread on page 69 of the magazine shows that the young man wanted to go by the sci-fi-author-sounding name E. R. Musk and that he already had visions of grand conquests dancing in his head. The brief explainer states, “In this game you have to destroy an alien space freighter, which is carrying deadly Hydrogen Bombs and Status Beam Machines. This game makes good use of sprites and animation, and in this sense makes the listing worth reading.” (As of this writing, not even the Internet knows what “status beam machines” are.)*

This chapter talks about the ancestry of Elon Musk.

Musk’s mind worked like magic to give him visual perceptions of his ideas and thoughts.

*At five and six, he had found a way to block out the world and dedicate all of his concentration to a single task. Part of this ability stemmed from the very visual way in which Musk’s mind worked. He could see images in his mind’s eye with a clarity and detail that we might associate today with an engineering drawing produced by computer software. “It seems as though the part of the brain that’s usually reserved for visual processing—the part that is used to process images coming in from my eyes—gets taken over by internal thought processes,” Musk said. “I can’t do this as much now because there are so many things demanding my attention but, as a kid, it happened a lot. That large part of your brain that’s used to handle incoming images gets used for internal thinking.” Computers split their hardest jobs between two types of chips. There are graphics chips that deal with processing the images produced by a television show stream or video game and computational chips that handle general purpose tasks and mathematical operations. Over time, Musk has ended up thinking that his brain has the equivalent of a graphics chip. It allows him to see things out in the world, replicate them in his mind, and imagine how they might change or behave when interacting with other objects. “For images and numbers, I can process their interrelationships and algorithmic relationships,” Musk said. “Acceleration, momentum, kinetic energy—how those sorts of things will be affected by objects comes through very vividly.”*

*The most striking part of Elon’s character as a young boy was his compulsion to read. From a very young age, he seemed to have a book in his hands at all times. “It was not unusual for him to read ten hours a day,” said Kimbal. “If it was the weekend, he could go through two books in a day.” The family went on numerous shopping excursions in which they realized mid-trip that Elon had gone missing. Maye or Kimbal would pop into the nearest bookstore and find Elon somewhere near the back sitting on the floor and reading in one of his trancelike states.*

Read from: 23