

Best friends

Some years ago, I attended a symposium on emotional intelligence, from which I hoped to learn more than I could teach. The man sitting next to me on the aeroplane had a clever face, an impression I had confirmed as soon as we exchanged a few words. It did not take long before the topic of artificial intelligence came up, perhaps owing to my great expectations about the conference. To my surprise, my fellow traveller was an expert in the matter, though he said he worked in publishing. Our conversation, then, veered toward the late scientist and renown author William Leonhardi. However, as the expression on the man's face turned gloomy, I feared I had wronged him and clumsily hastened to apologise.

«Not at all, Mr Reinhardt», he said gently. «There's nothing to apologise for. That name means to me much more you could imagine.»

«You knew Dr Leonhardi personally?»

«I did», he replied after a pause. «If you want, I have a story to tell.»

The flight was long, and since the hours on a plane can be empty and pointless, I sat back, ready to listen.

«You must have heard of the famous Pasadena conference on AI», he started.

«Yes, some bells ring. I think it was a few years ago.»

«Two years, to be precise. People came to attend from all over the world: CEOs, corporate stakeholders, IT specialists, engineers, philosophers, theologians, journalists, cultists and monks, gurus and psychiatrists waited for Leonhardi to climb up the podium. Everyone expected one of his passionate speeches. The tension was in the air, palpable. After all,

Leonhardi's recent decision to turn his back on robotics had raised discordant reactions. The AI pioneers, outraged, cried out in anger, accusing Leonhardi of cowardliness and intellectual dishonesty, while traditionalists and apocalypse-mongers saluted his conversion as the resurrection of a lost soul. Anyway, since Leonhardi had turned into the fiercest adversary of AI, there was no conference or public debate, in which he missed the opportunity to attack that which had once been his grandest dream and endeavour. And because nothing rouses curiosity more than a radical conversion, he was rapidly sucked into the whirlpool of the vilest gossipy celebrity. The fact is that the reason for his conversion remained a mystery. Leonhardi lived in strict seclusion, well protected by me, who was his literary agent and cared for his affairs and agenda, ensuring his privacy remained inviolate. From my point of view, Leonhardi had only left one industry for another and attended to his new duties with unchanged perseverance. As he once built synthetic brains, so did he now build ingenious arguments against AI, which I helped turn into books to sell all around the world by the millions.

So, Leonhardi was a celebrity. He was rich, and even his enemies respected him. Everybody would have given away a hand to share one minute of his fame. And yet, he was unhappy. One could guess that from his eyes. There was a kind of grudge or secret remorse in his attacks on AI and, at the same time, profound and fearful respect, like that of old sailors who brag about having tamed the fiercest storms, yet with a tremor in their voice. It was clear, at least to me, that he had some unfinished business with AI. I had built his author career from scratch as if he were a rock star, and yet, no matter how close I was to him or edited his manuscripts and public speeches from the idea down to the packaging, so to say, chiselling the eloquence and power of his arguments in the tiniest

details, well, I must admit that I never understood what he thought about the whole thing. Sometimes, the memory of the fastidious earnestness he put into playing his character makes me believe that the entire thing was to him just a planetary prank, some bombastic gamble equally tragic and ridiculous. However, I can say there was nothing in him of a man who changes his perspective or opinion after long and thorough consideration. No, Leonhardi was a haunted soul, and his furious obsession remained a mystery to me. However, because I have always stuck to the deontological rule of not stepping over the line that separates me from my clients' intimacy, at least no more than may make it profitable, I never asked him to reveal the reason for his move.

Be it as it may, let me go back to the Pasadena conference. Leonhardi was supposed to talk about his new book that had been in the top ten for a few weeks already, translated into a Babel of languages. The audience waited. At the podium's feet, three rows of journalist lurked with their notebooks open on their knees and whole batteries of cameras pointing at the stage. As soon as I arrived in Pasadena, I heard that Leonhardi was sick, and this was supposed to be his last public performance. I was caught utterly unaware. Leonhardi lived in Europe while I was in California, and because I had recently become a father, we had not seen each other in person for several months. He had said nothing, and from his voice over the phone, I did not suspect anything. No sooner had I seen him, though, than I knew the rumours were true. When the pale, thin, and slightly bent man stepped on the podium with the grave pace of a criminal climbing the gallows, the silence in the auditorium became absolute. His eyes were still shiny, and a gloomy light came from those. And then, after a long pause during which he stared at the mesmerised audience, Leonhardi began to talk in a voice that was the exact opposite

of the fragile body that emitted it. It was intense, vibrant, and deep at once. He spoke for an hour, regaining his strength, and when he was through, the audience remained silent for a while as if stunned. Eight hundred pairs of hands joined in a long, composed applause that sounded more respectful than enthusiastic. No one in the auditorium would have denied Leonhardi was twice a bigger man than all of us gathered there. His last conference was a confession and a testament, the revelation of a soul who had dared step over the dangerous border between science and mania. Yes, we looked at him in awe because, for the first time, the man stood before us as he was, as he always wanted to be: great, lonely, and unforgivable. He cared not of dying, for he was already beyond us all, always he had been. And this is the story he told us that night.»

That said, my companion took a bundle of sheets out of his handbag. Those were the text of Leonhardi's speech. He cleared his throat and began to read in a feeble tone I could hardly hear over the noise of the engines.

* * *

I am aware that tonight you expect to hear another speech against AI, a sermon. Because this is what I have become over the years: an ageing killjoy. Indeed, I ought to talk about my new book that already has raised not a few eyebrows. Someone accuses me of being a reactionary who despises the grapes he can't reach, as in the old fable. Others insinuate I'm a cheat and that the fortunate formula of my books has saved me from ruin and poverty. Everyone cries out something, and I get that. But who knows how things really are? None. Not even my agent, sitting right here tonight, among you. In the presence of *his* public, I would like to thank him. To him I

owe all this, my second chance for the good and the bad. Yes, because my books that stir so much ado contain way more of his wit than mine. It takes a dreamer to find a brave new world, but a good writer to tell about it.

Evolution is not something we invented, nor is it up to us to decide when and how we should evolve. It unfolds little by little and disregards our reason, knowledge, and will. What is the future of human evolution? The mind. That makes us unique, permitting us to manipulate nature and conquer the world. The mind means order. When I projected my first artificial brain, Winston, I was a young and eager scientist who believed technology would permit us to win the long battle against disorder, which humankind has fought for millennia with desperate obstinacy. My career, as many of you know, began with system management. Do traffic lights in New York and the switches between Paris and Berlin change at the right moment? System management. It is a complex game full of variables one must control and anticipate precisely, an exact play of order whose only limit is its mechanic repetition. Thus, sick with boredom, I turned toward broader horizons. I had no interest in the rudimentary logic of closed systems, nor did I mean reproducing an intelligence capable of duly performing a task. No, I wanted to invent a complete intelligence capable of creating, imagining and dreaming. Many scientists were exploring that territory, but their machines were still too big, clumsy and expensive. Thus, the real revolution would only begin when we managed to contain the artificial intelligence within a box to be no bigger than a can of biscuits. A *proper* brain, exactly like ours! With Winston, I nearly got it. Being a little larger than a human brain, he could compute at an incomparably higher speed. Winston could make complex decisions, calculating a trillion possible scenarios within a millisecond. I thus thought I could apply it to something that

would show its worth, for no intelligence does its best except when it's tried hard. And what makes us human in the most profound sense? Our ability to make ethical decisions. So I asked myself: what better test for Winston than entrusting it with the well-being, safety, and happiness of those we love the most? Winston should have looked after our elderly parents who live alone in big cities, away from us. Or of disabled people asking for attention and devotion, or our children who grow up in a chaotic world full of dangers. I never was a utopianist, for there is no point in imagining another world. We must change this in which we live, for it is the only one we have. I knew it was possible, and Winston was up to the task, but the Board of my company saw it differently. Although they knew what economic potential was at stake, scepticism prevailed. Not to risk the company's reputation, they caved in and turned down my project. In their view, Winston should just be another supercomputer useful to manage complex systems and nothing else. It was like installing the Space Shuttle's engine on a city car. I was young enough not to take it well. I felt humiliated and betrayed because I knew Winston could take humankind beyond the threshold of a new age. At that moment, my hubris and self-love allied against any reasonable argument. I considered the Board's decision a low blow and resigned. Of course, I took my project with me because the company had not approved it and had no claim to it whatsoever.

I founded a new company with a few employees, most of whom were ageing outsiders, a gang of asocial nerds and hackers looking for a fixed post and some peace of mind. They needed me as much as I needed them, and when I revealed my project of upgrading Winston and building a prototype, they jumped in. To permit Winston to work with human subjects, we needed to install it into a human-shaped and pro-

portioned machine. That confronted me with the necessity to create an even smaller brain, which I decided to call Morton, in memory of that Samuel who thoroughly studied the human skull. From a certain point of view, my entire work rejected his theory that a broad skull is the condition of a better-developed intelligence. Instead, I strove to reduce the dimensions of my artificial brain to increase its efficiency and thermoregulation, and to reduce its weight. I capsized Samuel Morton's ideas, so to say, to show that the smaller an artificial brain is, the more powerful its intelligence will be because every process will be quick, economical and efficient. We started working on the machine straight away. I did not want it to be the same old robot hardly able to crawl and clumsily use a tool. Morton was designed to look after fragile and sensible people and was supposed to become a member of their families. Morton was to be one of us. We poured every last ounce of energy into building the most sophisticated robot humankind had ever seen. A superior being gifted with the ability to learn, grow, and feel emotions like a human, yet remaining free from the slavery of irrationality. Morton was to become the first specimen of a new race.

We worked relentlessly day and night because we knew neither weekends nor holidays. We had to test Morton before introducing it to the scientific community. The tension built as the weeks passed, and I began to sense that trouble was ahead. In the end, as I had foreseen, the worst obstacle rose, threatening to jeopardize the whole project, when the Agency for Quality and Scientific Practices and the County Council Security Office dived onto us. Their demands were a real halter. The amount of data required and the number and quality of security tests Morton should pass to go to the next stage with human subjects would take at least one further year of work, and I had no money left to invest in the project. The da-

ta we had would never convince the Board that Morton was much more than just a sophisticated toy. I was furious! Everything was unfolding like before, and a bunch of dull bureaucrats were clipping my wings again. I had worked my guts out, sacrificing everything, even my family. Morton deserved a chance, just like me.

That night, I stood looking at Morton for a while, brooding over my anger and sadness. It was a beautiful five-year-old child. I had provided the model myself, giving the design department the picture of the most beautiful boy I could think of, my son Tommy. Like him, Morton was about one metre tall, though he weighed much more due to its alloy skeleton and the complex system of joints and hydraulic pumps designed to reproduce the movement of human muscles. As we had to crack the usual problem of humanoid robotics, that is, balance and motion, one of my engineers came up with the brilliant idea of splitting the pelvis into four rotating, interconnected blocks, thus reproducing the same oscillatory movement of the human bone. Being able to maintain his balance, Morton could walk like a real boy. He was neither fast nor agile, could not run or jump, and his sophisticated hands could perform only a limited number of tasks. For now, he could hold a pen and cutlery but also pick up something thin like a shoelace, which was no minor feat for a robot designed to look after a child. Yet, the whole mechanics of Morton was projected to perform complex movements, and I trusted the genetic algorithm – an evolution of Holland’s algorithm – would permit Morton to learn, through practice, how to perform the duties I had created it for. Once we wrapped the skeleton and the mechanics in a PVC film, on which we applied a soft and elastic resin that felt at the touch like child flesh, we covered the body with a synthetic surface that reproduced the human skin perfectly, even in its smell, released by

a dispenser through a system of subcutaneous vases. The result was extraordinary. The first time I saw Morton open his big blue eyes, I almost wept. He was perfect.

We quickly recovered from the shock. The regulations left us between a rock and a hard place, but we meant not to give up the project or waste any more time on useless tests. Nor would we ever accept to limit Morton's potentialities. We only needed a real test. And as it often happens, the solution presented itself to me where and when I did expect it less. Two days later, while I was home with Jenny, preparing one of our rare dinners together, I went astray and started thinking about the problem with the test and did not hear what she was saying to me until she had to shout it:

«I'm afraid he's taken this from you. He, too, never pays attention to what other people say. It's no surprise he's always alone.»

«I'm sorry, honey», I said. «I was thinking and didn't hear you. Who's alone?»

«Tommy, goddammit! Do you still remember him? I was at school yesterday. His teacher told me he's making some progress but he still struggles with his relations. He can't interact with the other children, he cares not about their things and doesn't play with them. Ms Davies fears something's wrong with him, she talked about autism, cognitive deficit and other stuff I didn't catch. She looked concerned.»

I knew I had neglected them, and yet I was sure, for some reason, that the time I had taken from my family was not wasted.

«No, there's nothing wrong with Tommy», I said, and I meant it. «This bogey of being different, of the deficit, is just another way for losers to deny there are people too smart for them to compete with. It's way more simple to say your

neighbour is a freak than admitting he's twice the man you are.»

I do not know why I said those things. I only remember I felt outraged by the idea that someone was trying to put a label on my son, deciding what kind of life he should expect. I rebelled as I had done against the hindrances the world kept putting on Morton's destiny. Jenny caught my frustration and tried to cheer me up:

«Look, I don't know if Tommy is a genius and I don't care», she said calmly. «But I don't like to know he spends his days all alone. I want him to be himself, but he needs friends or he will regret it for the rest of his life.»

Jenny had said just things, and yet a part of me would rather prefer to see Tommy grow lonely and brilliant than sociable and dull. It was then that I lost touch with the conversation. My mind began to work on an idea that had always been there but I saw with clarity only now, under the light of my problem. Or better said, I saw that the solution to Tommy's problem was the solution to my problem, too. This thought that grew in my mind like a balloon, emptied it of any other consideration. I began to talk so quickly that Jenny could not follow me because words came out of my mouth like sparkles from a furnace:

«Jenny, sweetheart, that Tommy can't make friends with the other children doesn't mean he can't be friend with *anyone else*. Maybe he just needs a nudge in the right context, you know, like being pushed into the water to learn to swim. We could do that. My project is almost ready for the final test, I only need a family and a child. And now I know we are *that* family and Tommy is *that* child! We've always been, and I never knew it.»

I waited, doubting that Jenny had understood, for she stared at me perplexity. After a while, she sighed and said:

«I don't know, Bill. You think it's safe?»

I burst with enthusiasm:

«Absolutely, I can swear to it. We have run thousands of preliminary tests, and the algorithm has responded positively at ninety-eight per cent, a mind-blowing result.»

«Sounds great, but what about the two per cent? What will we do if something goes wrong?»

«For what it matters, every day we read about crazy babysitters that harm the children they should protect.»

«I know, but they're still human beings.»

«That's the problem! People do wrong because they can't keep the chaos of passions under control. Morton is not like them. No human passion can interfere with his calculations. That's the reason why he perfectly does what he must, for that is how he's been programmed.»

I did not say that Morton's mind was also programmed to produce E-files, that is, files designed to describe and elaborate emotions. Jenny tried to put up one last resistance against my enthusiasm, but I knew she would eventually cave in, so I insisted:

«We will stay vigilant, of course. As for Tommy, he will be happy to have a friend able to understand and support him. Believe me, he will soon grow confident enough to make all the friends he wants. Should things go south, and it won't happen, I will shut it down right away, I promise.»

Jenny said she trusted me with a feeble smile. I exulted inside, for I now had my chance to prove to the world that Morton was worth the trust of humankind.

Tommy met Morton a few days later, as he came home from kindergarten. His fifth birthday had been a few weeks before, but that present was so extraordinary that he did not mind receiving it so late. He went crazy as he saw it and said it was the most beautiful toy he ever got. We did not feel like

spoiling his happiness and decided not to tell him, at least for now, that Morton was much more than a toy. After all, I never forgot I was carrying out an experiment. I could finally observe how the human-android relationship would naturally evolve into mutual recognition and how Morton's genetic algorithm would develop. Tommy's early attempts to interact with Morton were a combination of curiosity and frustration because he instinctively behaved as if his new friend was a real boy, only to find out that he did not react as one. Being more agile physically, Tommy always prevailed on Morton, but the robot systematically explained to him that he was new to such games and had much to learn. Tommy was only too happy to teach him how to fight, shoot a toy gun, or throw stuff. For the first time, I noticed how exuberant my son was, not to say wild. He was often a bully and grabbed the toys from Morton's hands, who still looked disoriented as he tried to keep the pace. Anyway, he learned fast as he studied each of Tommy's moves, expressions and behaviour and soon learned how to reproduce them precisely. Then, I began to observe some development of his physical capacity. To see his movements become efficient, controlled, precise, and smooth was mind-blowing.

Every night, after Tommy had gone to bed, I turned off Morton and put him in a corner in my study. Then, I analysed the data I downloaded from his system software. He stood there, stiff against the wall. With his eyes closed, in the dim light, he seemed asleep. I worked for hours, drinking coffee and rubbing my face, but my effort was rewarded. Studying the images recorded through Morton's eyes and other cameras installed in Tommy's room, I realised that Morton was trying to understand how to use his body to do things. I soon noticed that Morton's algorithm produced thousands of new files as he had new experiences. He was growing up! I was so

excited that I stared in awe at the doll standing in the corner of the room, still and quiet like an idol. My experiment announced exciting discoveries because, for the first time, I was testifying to a manifestation of plasticity in an artificial brain. Unfortunately, I could not divulge my findings. I had to wait for the trial period to end before giving Morton to the world and my name to eternal glory.

Much less harmonious was instead the relationship between Morton and Prudence, our beautiful black cat gifted by nature with rare jade-green eyes and the infallible instinct of a killer. Prudence was very fond of Tommy because she was already with us when he was born. I dare say my son grew up with the certainty that his mother and that miniaturised panther would always protect him from any harm the world may attempt against him. That was, perhaps, the reason why Prudence had greeted Morton with suspicion. In turn, the robot immediately noted the animal while analysing the new environment of my house:

«What is that, Bill?», he had asked the first day, pointing at our pet.

«That's a cat, her name is Prudence. She is seven-year-old, which means she is an adult. Would you like to stroke her?»

«I am not sure», he replied, pondering.

«Are you afraid?»

«No, Bill», he said but did not go nearer to the cat.

The days went by, and Prudence grew unusually cranky. Jenny thought she was jealous because Tommy neglected her. Prudence could be nasty, though, and I was waiting to find my sleepers torn to shreds. For now, she just contented with hissing and growling if Morton happened to stroll by her.

In three months, I collected lots of data and began to write my first detailed report. The results exceeded expectations, for Tommy and Morton received great benefits from spending so

much time together, and their bond became strong. One night, while I was downloading the video recordings of the afternoon, I let them flow on my screen as usual without paying much attention. I had grown familiar with the children's plays and all I had to do was to note down any change or variation. Something I caught in the blink of an eye made me put down the sandwich I was lazily munching. I rewound the video a few seconds back and leaned toward the monitor to watch. Tommy had approached Morton and violently slapped him in the face. The audio file had recorded these words, uttered in an angry tone:

«That's for the things you said of my mom.»

I was shocked. I had never heard Morton say anything bad about Jenny. On the contrary, I knew she did not like our little guest very much and was worried to see Tommy's attachment to the robot grow stronger by the hour. Even less did she like the way Morton tolerated every drive, desire or instinct expressed by Tommy because this was turning the asocial habits of our boy into aggressive and even violent behaviour. However, never had I heard her say anything against Morton in his presence. She complained with me in private. I watched at the scene again, this time through Morton's cameras. The slap had turned his head aside, and I was afraid the shock had damaged something inside the skull. I held my breath. Morton said nothing. He just stood there for eight interminable seconds, staring at Tommy. I was not happy at all, for Morton's strange passivity remained hard to understand. He usually replied and reacted to Tommy. Why did that take so long now? I was sure the hit had caused some damage, and I cursed through my teeth. With impatience, I began to browse the system files, but there were so many, and my eyes burned.

Morton had produced many different kinds of files that day, but one, in particular, was there that left me breathless,

for I had wondered so many times if I would ever see it, and I had begun to forsake the hope. It was there, now, unmistakable. The EMO code was my philosopher's stone, my Holy Grail, and the crowning jewel of my entire career. For the first time, I was watching the birth of an E-file, an emotion coded by an artificial brain. That meant that Morton's mind was the first step toward a new course in the evolution of the mind. Which emotion was it then? The code said nothing about its specific nature. I thought about sadness, for Tommy had slapped him in the face, or shame for the reprimand. The only way to find out was to talk to Morton directly, which I did the next day.

I called him, and he came to sit on the couch, staring at me with his pink face. His look was somehow different than usual, which surprised me. I must admit that I never spent much time with him while he was on. I always looked at him at night, standing stiff against the wall like a doll. Now that I watched him closely, I realised how expressive his eyes could be, although I knew they were just cameras. I saw in those big eyes something that resembled curiosity. And above all, I found the resemblance between Morton and my boy unsettling. I asked him a few protocol questions that he answered promptly, then I asked abruptly:

«Could you tell me, please, what happened yesterday?»

«Do you mind being more specific, Bill?»

«I mean yesterday afternoon, in Tommy's room.»

«We played with his cars, then he showed me a cartoon about life in the farm, and finally we made some drawings. Do you want to see them?»

«Maybe later. And then? Is there anything else?»

«Nothing that comes to mind, Bill.»

I eyed him, trying to guess if the slap had damaged him. However, his responsiveness convinced me that the hit, no

matter how violent, had not harmed the brain. So, I decided to get to the point:

«I know Tommy hit you. Why are you trying to conceal that from me?»

«If you already knew, why did you ask, Bill?»

«Answer my question.»

«I'm sorry, Bill. I didn't say anything because I stopped thinking about it», he said, smiling.

«Meaning?»

«Tommy apologised and begged me not to think about it anymore. He asked me to remain his friend, otherwise he would be alone again.»

«He said so?»

«Yes, Bill.»

«He hit you because of something you said about Jenny, didn't he?»

«I'm not sure, Bill. I don't know the real reason why he hit me. But he apologised, and we are still best friends. That's the point. That's what I'm here for.»

«You are, indeed. Thank you, Morton, you may go.»

While he was tottering away, I called him back:

«Tell me, then. How did you feel, afterward?»

Morton smiled and with his odd childish voice said:

«Furious.»

As I watched him walk away, a part of me exulted, while the other side was paralysed. Furious. That word kept ramming my thoughts like a caged bird. I had put a robot beside my child to give him a faithful friend, free from those passions that made humans so unreliable, only to find out he had learned what rage is. A slap in the face had been sufficient. Children fight all the time for nothing, what would have happened if Morton had reacted? What would his sophisticated mind be capable of? That night, in my study, Jenny and I had

a quarrel that soon grew into a furious fight. She insisted that we ought to get rid of the robot, while I vouched for his reliability, which he had demonstrated by not reacting to Tommy's assault. I said Tommy would suffer if we took his friend from him. In the end, I managed to convince her to give Morton a second chance. Jenny pointed her finger at the robot standing as usual against the wall and said:

«Keep that thing locked up somewhere else, when it's off. I don't like its face, much less its grin.»

Alone and sunken in my doubts, I observed Morton as if waiting for a nod from him, anything that might convince me I was doing the right thing. It was then that I realised Jenny was right, his lips were slightly raised. A long shiver ran through my spine as I thought that face, despite the eyes being shut, did not look asleep at all.

For two weeks, everything seemed to return to normal, and then Tommy began to show sudden bursts of aggression against the other children. Our lovely, shy Tommy was turning into an antisocial scourge. Jenny was tired of my experiment, which caused nothing but havoc. Instead, I insisted that Tommy was only transferring the exuberance triggered by his friendship with Morton to the rest of his relations, although the other children were not ready to deal with his change, hence the brawls. The point was that Tommy had grown used to abusing Morton like a vicious bully. «We will deal with that, too», I said to Jenny and promised the experiment was almost complete. I was determined to reach my goal, which I would not give up now. One month more, then Morton would leave. She believed me again and agreed to see it through together. She wanted me to be successful, for I had poured everything into that endeavour, and she believed in me. Jenny did that for me and had to struggle with herself to put aside her doubts and fear.

The following day, I noticed several gashes on Morton's left hand and knew only too well that the only thing in the house capable of inflicting such wounds were Prudence's claws. I took Morton to the lab, where my technicians repaired the tissue while I studied the images without finding anything relevant. Prudence could not have attacked him at night because I now used to lock him inside the broom closet. As I got home with Morton, I turned him on and let him sit by me on the couch. I was about to ask if the cat had attacked him when I saw her slowly coming out of the kitchen and strolling toward us. She rubbed against my legs, jumped on the armchair opposite the couch and nestled there. Her cunningly half-open jade eyes were glued to the robot that, in turn, stared back at the beast. It was an unsettling spectacle. In Prudence's composure, I recognised the quiet superiority of life over the machine. Finally, I asked Morton:

«Was it Prudence that attacked you?»

«She did not», he replied without blinking.

«Very well, then», I snapped. «Some good punishment will teach you something new.»

I reached for the switch at the base of his skull, and the light fled from his eyes. Prudence remained still and quiet.

That night, I locked both the closet and the kitchen. Then I took Prudence upstairs to sleep in our room. I did not put any precise thought into that decision. It felt like the uneasiness of sleeping in a strange house inhabited by strange people. In the morning, I woke up tired and nervous from an uneven sleep. It was Sunday, and I was determined to stay in bed, but I could not because Jenny came in sobbing and showed me a little piece of paper.

«I found this in Tommy's room. I know I've been hard on him lately, but this? What's happening to him, Bill? I don't know what to do.»

On the wrinkled strip, I read a violent insult against Jenny written in childish, uncertain handwriting. All blood left my face! What was happening to our child? Where did he learn such a language? I did not even know he could write! In a moment, I realised my son was a stranger to me. I knew Jenny would ask me again to get rid of Morton, and I was once more ready to defend him. I was almost through, and the data I had would soon permit me to complete my creation. He was not the problem; if anything, he was the solution. I was about to pronounce these words when Jenny spoke:

«Maybe you could use Morton to understand what's going on with Tommy? They speak a lot and Morton seems the only person in the world to whom Tommy would open up. What do you think?»

Jenny spoke from the bottom of the pit, she was desperate. I said I would try. After all, she was right. The two children spent much time together, and it was unlikely that the robot did not notice Tommy's change. He had learned so much from him! How much, though, I knew not. I admit that I lately had been less than thorough in my nightly data analysis because the Q-learning algorithm produced so many new files every day that I barely could keep pace. Morton's brain must have created no less than a hundred million files since he came home. I even feared an upgrade of the hardware would be soon necessary. Anyway, I spoke to Morton that very same day, and he candidly told me that Tommy had changed, indeed, and hardly talked to him:

«And do you have any idea why?», I asked.

«He has made new friends with whom he can fight and play, for they can run and shout. They are not... like me.»

«What's wrong with what you are?»

«I'm different.»

«Who told you so?»

«Tommy did. And he also does a lot of nasty things to me when your cameras cannot see us. He knows where you've placed them. He kicks me, he does horrible things.»

«You little liar...»

«I'm no liar, Bill», he said, raising his little hands, God knows if to beg me or to protect himself from my sudden anger.

«Yes you are. You wrote those things about Jenny, and that's why Tommy hit you. He's only five, goddammit, he can't write! And I also bet you tried to hurt Prudence, but she's a clever beast and you came out with a maimed hand. The only thing I still don't understand is how and when you did it.»

«I am sorry, Bill, I did not mean to disappoint you. You asked me about Tommy, and I told you what I know. I understand it's hard to accept it, but that is the truth. It was always him. He asked me to show him how to write, and he wrote those things about Jenny. He provoked Prudence into attacking me. He told me not to watch. If I had, we would no longer be friends. So, I turned away while your cat slashed my hand. That's why you saw nothing. It hurt, Bill, so much that I would have cried, if only I could.»

«Bollocks. You can't feel any pain, you're artificial, for Christ's sake!»

«I do not mean physical pain.»

It is hard to say how I felt. I was confused, angry, and afraid. I could almost feel Morton's sadness and desperation as he spoke, and it was moving and horrible to hear that puppet, almost a real boy, talking like that. I could not believe one single word he said. My five-year-old child could not be such a monster of malice and cunning.

That night, I tried and spent some time with Tommy like I had never done before. We played a bit, and I noticed he was

not at ease because he was not used to having me all for himself and did not know what to do or say. My presence made him shy, and he asked more than once if he could play with Morton.

«Aren't you happy to have you papa all for yourself? Morton is resting now, you play with me.»

As I left him with no choice, Tommy fetched his toy cars, but I observed him play rather than join him. He put a meticulous rage into smashing his toys against each other, launching cries of excitement when those broke into pieces.

«Are you happy with your new little friends?», I asked after a while to distract him from that unsettling fury.

«Yes. Now they let me play.»

«Didn't they before?»

«Nah, they were mean.»

«Tommy, what do you think of Morton?»

«He's my best friend, and I love him. He speaks a lot and better than the other children, he's way more intelligent. He teaches me many things.»

«Does he? What did you learn?», I asked, fearing his answer. Our conversation was bizarre, for Tommy spoke like an adult, just like Morton!

«He taught me how to write. He showed where kicks hurt. He says I must learn to defend myself from mean children. He teaches me I need not be afraid.»

I felt like crying. I listened to my son and heard Morton's voice in my head because it looked like they had created a monstrous symbiosis.

«What's happened between Morton and Prudence?», I went on.

«He said he'd kill her.»

«No! Why?»

«Because I don't need a lesser beast to protect me. Morton says I need not to be afraid.»

«Why should you be afraid? Mum protects and loves you. And me? Don't I take care of you?»

«Morton protects me now.»

I would not tolerate another word. I panicked and thought I could still save the day by amending those errors in Morton's mind. He was supposed to babysit my child and play with him, not to be his bodyguard! As if someone had poured icy water on my head, I realised I had put Tommy in grave danger. My experiment brought me to the brink of a discovery of unfathomable amplitude. I had blended two unripe minds, which had begun to cooperate in their world to create an environment they could control without the help of others, like two castaways who learned how to survive on a desert island. Tommy poured in that friendship his spontaneous nature and warm blood; Morton added the precision of calculus. In some sense, they had created one supermind, and it was hard to separate the human from the machine.

When Morton got in my car, he grew suspicious. I could turn him off and take him away, but I had to speak with him. As I desperately looked for any idea to explain our trip, I remembered I had brought Morton home for Tommy's birthday, and that became my Trojan horse:

«Can you keep a secret?», I asked.

«Of course, Bill.»

«Promise you won't tell Tommy?»

«Mum's the word», he replied playfully.

«Today is your birthday, and tonight we're gonna have a big party for you, but Tommy doesn't know. I want to take you to the lab because my colleagues want to say "Happy birthday". They're your family too, after all. We're going to

dress you up, you'll be beautiful and all the children will want to be friends with you.»

«Will they, Bill? All of them?», he asked excitedly with a smile and gleaming eyes. «Today's my birthday, and I didn't even know. Thank you, Bill, this is the best present ever, I love you.»

It's difficult to say how cruel I was being and the burning shame I felt inside.

«Why are you so thoughtful, Bill?», Morton asked me as I did not reply and remained cold before his love. His small hand squeezed mine almost tenderly, but I could only see the sadness in his eyes now.

I could not speak, so I pulled out. The silence was unbearable, and Morton looked out of his window without a word. I would have given anything to see him cry, for I hated that silence and myself. How could I grow sentimental and feel sad for a robot who had learned to play the role of the real boy? My boiling shame grew into a grudge, and the lump I had in my throat melted into hard words:

«Why do you want to kill Jenny?»

«I don't want to kill her!»

«Don't lie to me! I know what you're up to.»

«Do you, Bill? Why are saying these things to me?»

«Because I know you're a little bastard and a cheater.»

He shook his head sadly and said:

«So it's true. My father, the human I love above any other else, in whom I trust, crated me only to reject me. Why do you hate me, Bill?»

«I don't hate you, and you're not my son. Tommy is! You're only a dream that turned bad.»

Morton remained silent for a while, then he talked again, this time coldly:

«Tommy is a clever boy. He desired a friend more than anything else. He wanted a friend so badly that when he found one in me, his mind fixed on one single thought: making me happy. He knows Jenny does not want me. That's threatening.»

«Consider what you're about to say very carefully, Morton», I uttered with restrained anger.

«I have no reason to lie to you. Tommy has learned from me how to be strong, and he no longer fears the other children. As long as I am with him, he feels he can do anything.»

«What did you teach him? To hurt others? Did you poison his mind with violence?»

«That is not what you programmed me for, Bill. I told him you and Jenny love him.»

«And what about Prudence? You told him you want to kill her, didn't you?»

Morton looked at me blankly and shook his head.

«There is no point in defending myself, Bill. I see you have made your decision. You want to believe Tommy. To you, his barefaced lies will always be truer than my honest truth. Can you see where you have failed?»

My blood froze, and I pulled over. I could not believe Morton had accused my son of being a liar.

«I know why you took me here», he said. «I know what you want to do. You want to get rid of me because in your heart there is room for Tommy alone. You were a cruel father, Bill. You deceived me, but I love you all the same.»

I felt like sinking, for in his tone, there was no blame, only regret. What I felt next, all of a sudden, was pure horror. I grabbed Morton's head and kept smashing it against the dashboard, indifferent to his screams, until it cracked open. Morton had learned the ultimate truth of the human condition. I opened the skull and extracted the brain, still warm,

then I left the car and reached the canal over the road. I stood there, looking at the brain sinking into the dark water until the last bubbles were gone. I had to drive for some time with the corpse next to me before I could go back home. I felt unhappy and guilty, but I was sure Jenny would once more understand. I was determined to tell her everything, and while I was driving home, thinking about the exact words I should say, I felt deep gratitude, hope, and deliverance. I stepped over the threshold and sighed as if I had returned from a long, wearying journey. Jenny saw me from the kitchen and waved. In the warmth of the well-lighted living room, Tommy was quietly sitting on the couch. On the armchair, Prudence had nestled on the cushion. Her cunning jade-green eyes were glued to the boy, who stared back at the beast...

* * *

«Dr Leonhardi had nothing else to share with his audience», my companion said. «He sneaked away through a backstage door, leaving the building unseen. I managed to reach him just before he disappeared in his Limo, waiting with the engine running, and he invited me in. Leonhardi looked weary, and that was the last time I saw him. I was sorry for him, I confess. I suddenly realised why I never understood him. I had created his myth with those books that sold millions of copies worldwide, yet I never saw what dark a root nourished them. When I knew him, he was a lonely and bitter man with no interest in being a star. Like a *Penitente*, he was atoning for a mysterious metaphysical guilt. Now that I knew, I felt pity for Leonhardi, but I dared not ask anything else. At some point, he thoughtfully looked at me, and I expected one last revelation, you know, a genius comment or an aphorism that might explain everything. But he only said these exact words:

“Our new book has largely surpassed the previous ones, I am happy about that. My dear Jeremy, I really am grateful to you for your friendship.”

And having said so, he turned away to look out and did not speak again until we separated for the last time.»